CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

NEW COURSE PROPOSAL

DATE 12.17.06
PROGRAM AREA ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

1. Catalog Description of the Course. *[Follow accepted catalog format.]*

Prefix ESRM Course# 352 Title THEORY AND PRACTICE OF ECOLOGICAL RESTORATION Units (3)
3 hours lecture per week
hours lecture per week
☐ Prerequisites
☐ Corequisites
Description Introduces the theory and practice of modern ecological restoration. Conceptual similarities in the approach to wetland, riparian, forest, grassland, and subtidal restoration efforts will be explored. Special attention will be given to failed restoration efforts, articulating the conditions leading to such failures, and minimum performance standards for successful projects.

Graded
☐ Gen Ed ☐ CR/NC ☐ Repeatable for up to units
Categories
☐ Lab Fee Required ☒ A - F Total Completions Allowed
☐ Optional (Student's choice) ☐ Multiple Enrollment in same semester
☐ Mission Based Learning Objectives: ☒Interdisciplinary ☐ International ☐Multicultural ☐Service Learning
☐ Title V Section 40404: ☐Government ☐US Constitution ☐US History

2. Mode of Instruction.

	Units	**Hours per Unit**	**Benchmark Enrollment**	**Graded Component**	**CS #** (filled in by Dean)
Lecture	3	1	20	☒	
Seminar				☐	
Laboratory				☐	
Activity				☐	

3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*
This is a requirement for the Environmental Science emphasis of the ESRM major.
Learning Objectives. By the end of this course, students will be able to:

- describe the initial motivation behind common restoration efforts
- explain the implicit and explicit theoretical underpinnings of restortion projects, supported by case studies
- argue both the strengths and weaknesses of common restoration approaches to both technical and lay audiences
- delineate the most common failings of most Amercian and international restoration projects
- read and explain primary scientific literature
- articulate the multidisciplinary context (e.g. policy, legal, and public opinion issues) of modern restoration ecology

This course does not meet the University Writing and/or Language Requirement.

4. Is this a General Education Course YES ☐ NO ☒
If Yes, indicate GE category and attach GE Criteria Form:

A (English Language, Communication, Critical Thinking)
A-1 Oral Communication ☐
A-2 English Writing ☐
A-3 Critical Thinking ☐
B (Mathematics, Sciences & Technology)
B-1 Physical Sciences ☐
B-2 Life Sciences – Biology ☐
B-3 Mathematics – Mathematics and Applications ☐
B-4 Computers and Information Technology ☐

C (Fine Arts, Literature, Languages & Cultures)

C-1 Art	☐
C-2 Literature Courses	☐
C-3a Language	☐
C-3b Multicultural	☐
D (Social Perspectives)	☐
E (Human Psychological and Physiological Perspectives)	☐
UD Interdisciplinary	☒

5. Course Content in Outline Form. *[Be as brief as possible, but use as much space as necessary]*

I. Motivations for ecological restoration
II. General approaches to ecological restoration
III. What is a successful restoration?
IV. Implicit vs. explicit assumtpions and the Field of Dreams Hypothesis
V. Performance metrics
VI. Failure as an essential learning tool
VII. Implications of spatiotemproal stochastisity for restoration design
VIII. Articulating the pros and cons of restoration designs

Does this course overlap a course offered in your academic program? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?

Does this course overlap a course offered in another academic area? YES ☐ NO ☒
If YES, what course(s) and provide a justification of the overlap?
Signature of Academic Chair(s) of the other academic area(s) is required on the signature sheet below.

6. Cross-listed Courses (Please fill out separate form for each PREFIX)
List Cross-listed Courses

Signature of Academic Chair(s) of the other academic area(s) is required on the signature sheet below.

Department responsible for staffing:

7. References. *[Provide 3 - 5 references on which this course is based and/or support it.]*

Restoration Ecology 1987 edited by William R. Jordan, Michael E. Gilpin and John D. Aber. Cambridge University Press. 342pp.
Handbook of Ecological Restoration: Volume 1 Principles of Restoration. 2002 edited by Martin R. Perrow and Anthony J. Davy. Cambridge University Press. 444pp.
Restoration of Temperate Wetlands. 1995. edited by Bryan D. Wheeler, Susan C. Shaw, Wanda J. Fojt, and R. Allan Robertson. John Wiley and Sons. 561pp.

8. List Faculty Qualified to Teach This Course.

Dr. Sean Anderson and other ESRM faculty

9. Frequency.
a. Projected semesters to be offered: Fall ☒ Spring ☒ Summer ☐

10. New Resources Required. YES ☐ NO ☒
If YES, list the resources needed and obtain signatures from the appropriate programs/units on the sheet below.

a. Computer (data processing), audio visual, broadcasting needs, other equipment)

b. Library needs

c. Facility/space needs

11. Will this new course alter any degree, credential, certificate, or minor in your program? YES ☒ NO ☐
If, YES attach a program modification form for all programs affected.

Dr. Sean Anderson	10/12/2006
Proposer of Course	Date

Approval Sheet

Program/Course: ESRM 349

Program Chair(s)	Date
General Education Chair(s)	Date
Curriculum Committee Chair(s)	Date
Dean of Faculty	Date