CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS NEW COURSE PROPOSAL

DA'	E 11.27.06				
1.	PROGRAM AREA BIOLOGY 1 Catalog Description of the Course [Follow accented catalog format]				
	Prefix BIOL Course# 406 Title EVOLUTIONARY BIOGEOGRAPHY Units (3) b hours lecture per week hours blank per week Prerequisites BIOL 303 ☐ Corequisites Description Examines the spatial and temporal distribution of plant and animal groups with emphasis on historical, nivironmental and biological processes governing current patterns of species and habitat geography. Integrates heory and analytical tools from geology, paleontology, ecology, evolution and genetics to study the effects of global hange on biodiversity. Graded ☐ Gen Ed ☐ CR/NC ☐ Repeatable for up to units Categories ☐ Lab Fee Required ☐ Ontional (Student's choice) ☐ Multiple Enrollment in same semester				
	Title V Section 40404: Government US Constitution US History				
2.	2. Mode of Instruction.				
	Hours per UnitsBenchmark EnrollmentGraded ComponentCS & HEGIS # (filled in by Dean)Lecture3140Image: SeminarSeminarImage: SeminarImage: SeminarImage: SeminarImage: SeminarLaboratory ActivityImage: SeminarImage: SeminarImage: Seminar				
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 course will be an elective for Biology.					
 Upon completion of the course, a student will be able to: Students who successfully complete this course should be able to: Relate patterns in current species distributions to past geological and climatic events Describe Earth's major biogeographic regions Contrast the biotic and abiotic processes that govern species ranges Distinguish between models of dispersal and vicariance for disjunct species distributions Interpret an area cladogram Discuss the strengths and weaknesses of the theory of island biogeography 					
4.	s this a General Education Course YES NO X f 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-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]
 - Physical controls on species' ranges
 - Biological controls on species' ranges
 - Plate tectonics and Quaternary climate change
 - Speciation and extinction
 - Macroevolutionary patterns
 - Single species distributions
 - Dispersal
 - Endemism and disjunction
 - Phylogenetics and reconstruction of biogeographic histories
 - Island biogeography
 - Community and ecosystem distributions
 - Diversity patterns
 - Human impacts
 - Predicting future diversity patterns

Does this course overlap a course offered in your academic program? YES \square NO \boxtimes 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 X 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 description 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.*]

Biogeography, 3rd edition. M.V. Lomolino, B.R. Riddle, J.H. Brown. 2005. Sinauer.

Biogeography: An Ecological and Evolutionary Approach. C.B. Cox and P.D. Moore. 2005. Blackwell.

Space, Time and Life: The Science of Biogeography. G. MacDonald. 2001. Wiley.

Molecular Markers, Natural History, and Evolution. 2nd edition. J.C. Avise. 2004. Sinauer.

8. List Faculty Qualified to Teach This Course.

Biology Faculty

9. Effective Date and Frequency.

a. Projected semesters to be offered: Fall \boxtimes Spring \boxtimes Summer \square

b. First semester offered: 2008

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 INO IF, YES attach a program modification form for all programs affected.

Amy Denton

Proposer of Course

10/27/2006 Date

Approval Sheet Program/Course:

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