CACTUS YEAR 2015-2016

COLLEGE/SCHOOL/SECTION: Arts and Sciences

Course: Add: X Delete: (check all that apply) Change: Number Title SCH Description Prerequisite
Response Required: New course will be part of major _X_ minor _X_ as a required _X_ or elective _X_ course
Response Required: New course will introduce _X_, reinforce _X_, or apply _X_ concepts
Response Required: Grade Type _X_ Normal (A-F) _X_ CR/NC _X_ P/F

If new, provide Course Prefix, Number, Title, Measurable Student Learning Outcomes, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current online catalog, provide change and attach text with changes in red and provide a brief justification.

BIOL 4475

Evo-Devo (Evolutionary Developmental Biology)

4 semester hours

The objective of this course is to integrate two disciplines, evolutionary biology and developmental biology into a common framework of genetics. The focus will be on the evolution of developmental genetic pathways in order to explain the evolution of animal development. This course will explore how our growing knowledge of developmental circuits, and their variation, affects our understanding of how organisms evolve. Prerequisite: BIOL 3413.

Justification
Adding course to catalog that is now being taught as a special topic course and is expected to be taught repeatedly.

Approvals:  

Chair  
Department Curriculum Committee

Chair  
Department

Chair  
College Curriculum Committee

Dean

Provost  
06/2014

Signature  
Neal McReynolds  
Dan Mott  
M. Foran  
Frances Bernat

Date  
06/2014  
01/26/15  
01/30/15
Learning Outcomes:

Course Objectives:
1. Understand the general principles governing the genetic basis of developmental change.
2. Understand how evolution is connected to development and that development is a vehicle for evolutionary change.
3. Gain an appreciation for data and knowledge that comes from diverse fields in biology and how the integration of that knowledge allows scientists to ask and answer fundamental and otherwise unanswerable questions.