

NEW COURSE

Department: ORIGINS INSTITUTE
Course Name: **ORIGINS 3E03**
Origins of Species
To be offered first in 2007-08
Date: November 2004

Calendar copy description:

ORIGINS 3E03: Origins of Species

The concepts that are required to understand how species originate: natural selection, species definitions, temporal and spatial origins for organisms on Earth, adaptations. Three hours; one term.

Prerequisites: registration in Level III in the Origins Research Specialization or by permission of instructor.

Not offered in 2005-2006.

Expected enrolment:

50

Enrolment limited? If so, why?

Yes, to ensure that an environment that is conducive to developing skills in independent scientific research and self-directed, problem-based, and inquiry-based learning is provided to students.

Other department(s) consulted.

Biochemistry, Biology, Chemistry, Geography and Geology, Mathematics and Statistics, Physics and Astronomy, Psychology, Associate Dean of Science, Dean of Science, Provost, President

Is this course cross listed? If so indicate course(s).

Resource implications.

A \$7500 teaching buyout has been secured for this course.

Detailed course content and reasons for introduction of course.

Among the greatest scientific achievements was Darwin's theory of evolution by natural selection, familiar to all scientists as his *magnum opus* 'The Origin of Species.' His achievement remains today a philosophical pillar in natural science. This course will provide for students an modern perspective on the issues that Darwin considered. Topics will be chosen and presented in a manner that overlaps minimally with ANTHROP 2D03 GENETICS AND EVOLUTION, ANTHROP 2E03 HUMAN VARIATION AND EVOLUTIONARY CHANGE, and ANTHROP 3N03 PRIMATE EVOLUTION, which concern humans explicitly, and BIOLOGY 3FF3 EVOLUTION, which surveys a wider range in topics (so covers these in less detail). A possible reading source that would accompany lecture sessions and course material will be Darwin's masterpiece itself.