NEW COURSE

Department: ORIGINS INSTITUTE

Course Name: ORIGINS 3C03

ORIGINS OF STRUCTURE IN OUR UNIVERSE

To be offered first in 2006-07

Date: November 2004

Calendar copy description:

ORIGINS 3C03: ORIGINS OF STRUCTURE IN OUR UNIVERSE

Topics about structure in our universe will be explored: planet, star, galaxy, and large-scale structure formation.

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.

This course will provide an opportunity for students to explore how planets, stars, and galaxies form. Topics will be presented from an explicitly origins theme, so as to minimize overlap with other courses, such as ASTRON 1F03 INTRODUCTION TO ASTRONOMY AND ASTROPHYSICS, ASTRON 2E03 PLANETARY ASTRONOMY, ASTRON 3X03 GALAXIES AND COSMOLOGY, and ASTRON 3Y03 STELLAR STRUCTURE. The course material will complement material that is covered in ORIGINS 3D03: ORIGINS OF LIFE and prepare students who are enrolled in the Origins Research Specialization for advanced studies in applied Astronomy or Astrobiology.