

DOCUMENTS OF THE GENERAL FACULTY

**NATURAL SCIENCE REQUIREMENT OF THE CORE CURRICULUM FOR ALL
UNDERGRADUATE STUDENTS AT UT AUSTIN**

On behalf of the Educational Policy Committee, Professor Archie Holmes (electrical and computer engineering and committee chair) has submitted the following proposal concerning the natural science requirement of the core curriculum. At its meeting on November 20, the Faculty Council voted to accept an amendment from Professor David Hillis (integrative biology) to delete the section titled "SCIENCE AND TECHNOLOGY COURSE" from the previously amended motion to change the degree requirements for all undergraduate students at UT Austin (D 5097-5105). The section that was deleted from the motion was returned to the Educational Policy Committee for consideration. (For additional reference, see D 5011-5019, D 5106-5114, and D 5155-5163.)

The secretary has classified this proposal as *major* legislation. It will be presented to the Faculty Council at its meeting on December 11, 2006, and will be acted on at its meeting on January 22, 2007. Major legislation approved by the Council must be submitted to the General Faculty on a no-protest basis, as prescribed in the by-laws of the Council.

Sue Alexander Greninger, Secretary
The Faculty Council and General Faculty

NATURAL SCIENCE REQUIREMENT OF THE CORE CURRICULUM FOR ALL UNDERGRADUATE STUDENTS AT UT AUSTIN

Motion

The Educational Policy Committee proposes that the Faculty Council adopt the following change in how students can meet the Natural Science requirement of the core curriculum:

The Natural Science requirement is currently met by six hours of coursework in one discipline to meet a depth requirement and three hours of coursework in a second discipline to meet a breadth requirement. The six hour depth requirement remains unchanged. The three hour breadth requirement will be expanded to include an array of science, engineering, and technology courses that addresses problems facing society today and in the future.

Courses satisfying the depth and breadth requirements must be taken from an approved list developed by the Undergraduate Studies Committee and approved by the Faculty Council.

Background and Rationale

In Educational Policy's original motion to change the Core Curriculum (D 5097-5105), the following was recommended as a change to the Natural Science requirement:

Broaden the existing nine hour natural science requirement to allow that three of these nine hours be a science or technology course that examines their effects on society today and in the future.

This motion clarifies Educational Policy's intention for this change. The change outlined above gives degree programs additional flexibility in how their students acquire scientific and technology knowledge.

Many important advances made at the end of the 20th Century were based upon previous scientific discoveries and technological advances. This trend is expected to extend well into the 21st Century. As a result, professional and civic leaders must have a firm understanding of science and technology and be able to understand how these topics can be used to solve problems the society will face. With the science and/or technology knowledge gained from these courses, students are expected to better understand how chemistry can help us understand issues related to obesity and pharmaceuticals; how physics can help us understand this planet's origins; how biology can help us understand the preservation of our planet; or how engineering can help meet the energy needs of the world.

Currently, the following colleges offer courses that meet this objective: The Jackson School of Geological Sciences, Natural Sciences, and Liberal Arts. The expansion proposed above will invite other Colleges to participate in this endeavor.