VII. STANDING COMMITTEES

A. Academic and Student Affairs Committee

Establishment of the Master of Science and Doctor of Philosophy in the Department of Earth and Space Sciences

RECOMMENDED ACTION

It is the recommendation of the administration and the Academic and Student Affairs Committee that the Board of Regents grant authority to the Department of Earth and Space Sciences, in the College of Arts and Sciences, to offer the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degree programs, effective immediately. The M.S. and Ph.D. degree programs will have provisional status with a review to be scheduled in the 2012-2013 academic year. At such time that the Board of Regents grants continuing status, a ten-year review cycle would begin.

BACKGROUND

In December, 2006, the Graduate School received a proposal from the graduate faculty of the Department of Earth and Space Sciences requesting approval to offer the Master of Science and Doctor of Philosophy degree programs. The Department proposes to implement the program in autumn quarter 2007.

On March 21, 2001, the Board of Regents approved the merger of the Department of Geological Sciences and the Geophysics Program into one new Department of Earth and Space Sciences. Both units had strong M.S. and Ph.D. programs based on major research programs supported by a variety of federal agencies including the National Science Foundation, United States Geological Survey and NASA.

The proposed M.S. and Ph.D. reflect consolidation of the two separate degrees into a new umbrella program that has a common core and two tracks/areas of emphasis that correspond to the older separate degrees. Combining the two graduate programs allows both course and research components to become more interdisciplinary through combined applications of geology, physics, chemistry, biology and/or advanced computing techniques.

The ESS is a central component to the University of Washington’s science mission to study the natural world and is the major program on campus that studies the Earth and Space. It complements the Departments of Atmospheric Sciences, Oceanography and Astronomy, which investigate the atmosphere, oceans, and the space environments beyond the solar system. The Department also collaborates with the Burke Memorial Washington State Museum, the Program for Climate Change, and the Astrobiology program. The ESS program is the only Ph.D. program that offers interdisciplinary studies in Geology and Geophysics in Washington State.
VII, STANDING COMMITTEES

A. Academic and Student Affairs Committee

Establishment of the Master of Science and Doctor of Philosophy in the Department of Earth and Space Sciences (continued p. 2)

The Department of Earth and Space Sciences engages in research across a very broad range of the physical and biological sciences connected with the history and dynamics of the Earth and the solar system. Students are expected to gain sufficient expertise in their specialty field to become future leaders in their chosen research areas while at the same time having sufficient breadth to take full advantage of new developments for emerging multi-disciplinary approaches. M.S. and Ph.D. students must obtain demonstrable analytical and communicative skills, and additionally, expand the knowledge base by publishing scientific papers in refereed journals and writing a dissertation, and to provide citizenship through membership and participation in the scientific community by presenting results at national and international meetings.

The Graduate School coordinated a review of the M.S. and Ph.D. proposal in Autumn Quarter 2006 by faculty with expertise in the field from the Institute of Geophysics and Planetary Physics, University of California, San Diego, and the Department of Geophysical Sciences, University of Chicago. Both reviewers attested to the high quality of the proposed programs and recommended to the Graduate School Dean and Vice Provost that it be approved for implementation.

On April 26, 2007, the Graduate School Council recommended to the Graduate School Dean and Vice Provost that the proposal be forwarded to the Higher Education Coordinating Board for review. In Resolution No. 07-12, the Higher Education Coordinating Board on July 26, 2007 approved the M.S. and Ph.D. degree programs in Earth and Space Sciences.

The Dean and Vice Provost of the Graduate School, the Interim Dean of the College of Arts and Sciences, and the Provost have reviewed and approved the recommendation. The Higher Education Coordinating Board will be informed of the Board of Regents’ action on the proposed new M.S. and Ph.D. degree programs.