## VII. STANDING COMMITTEES

## A. Academic and Student Affairs Committee

Establishment of the Master of Science and Doctor of Philosophy Degrees in Biology in the Department of Biology

# 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 graduate faculty in the Department of Biology to offer the Master of Science (M.S.) and the Doctor of Philosophy (Ph.D.) degree programs in Biology. The M.S. and Ph.D. degree programs will have provisional status with a review to be scheduled in the 2013-2014 academic year. At such time that continuing status is granted, a ten-year review cycle would begin.

# BACKGROUND:

In May 2007, the Graduate School received a proposal from the graduate faculty in the Department of Biology requesting authority to offer the M.S. and Ph.D. degrees in Biology. The Department proposed to implement the degree programs in Autumn Quarter 2008 and anticipates admitting 15-25 students each year with a maximum total enrollment of 150 Ph.D. students (graduate student:graduate faculty ratio ca. 2:1-3:1).

Emphasis will be on the doctoral program. Few, if any, students will be admitted to the terminal M.S. in Biology. Students who, after a period of study and research, may determine they are unwilling or unable to meet the PhD. requirements may be awarded the M.S. if they meet the degree requirements. The proposed program will replace the existing Botany and Zoology M.S. and Ph.D. degree programs, which will be terminated.

In February 2003, the Departments of Botany and Zoology merged with the undergraduate Biology Program to form a new Department of Biology. Consolidating the Botany and Zoology degree programs reflects faculty recognition that the future of the biological sciences is the interdisciplinary study of living things at every level, from the molecule to the ecosystem.

Both M.S. and Ph.D. students will acquire and demonstrate research competence, breadth of knowledge, development of written and oral communication skills, and teaching ability in the biological sciences. Assessment of doctoral student learning outcomes will involve general exams, research proposals, teaching evaluations, publications in peer-reviewed scientific journals; master's student assessment will involve a thesis or a non-thesis requirement and a final oral examination.

Biology is the second largest undergraduate major at the University of Washington, with approximately 1000 declared majors and 500 graduating seniors each year. Graduate students are critical to the Department's undergraduate teaching mission. More than 50 graduate students (most from Biology) serve as Teaching Assistants (TAs) for BIOL courses each academic year, and another 15-20 serve as TAs in the summer. Graduate students are required to TA for at least three quarters as part of their training. They are

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Academic and Student Affairs Committee

Establishment of the Master of Science and Doctor of Philosophy degrees in Biology in the Department of Biology (continued p. 2)

also an integral part of the Department's research mission. Approximately one-third of the graduate students are supported as Research Assistants (RAs) on faculty grant funds, and another one-third are supported by research fellowships from the NSF, NIH, EPA, ARCS, or other resources. Additionally, graduate students provide service and outreach to the local community, state and beyond.

The proposed program will meet the interest and demand of students, state industry and the broader community. The Biology graduate program will provide leadership, cuttingedge research, teaching, and public outreach to various stakeholders. The M.S. and Ph.D. degree program in Biology will require no re-budgeting or altered allocation of resources. No other university in Washington offers a Ph.D. degree in Biology. The School of Biological Sciences at Washington State University offers Ph.D. degree programs in Botany or Zoology. Both UW Biology and WSU Biological Sciences will offer a M.S. degree in Biology.

Faculty with expertise in the field from the Department of Biology at Duke University and the Department of Biology at Western Washington University reviewed the proposal. The reviewers noted the Biology faculty are outstanding scientists who are nationally recognized and that the Department graduates are considered to be first rate. Both external reviewers recommended that the proposal be approved and the programs be implemented.

The Graduate School Council discussed the proposal on October 4, 2007. The Council recommended unanimously that the proposal should be forwarded to the Higher Education Coordinating Board for review and approval. The Vice Provost and Dean of the Graduate School concurred with the Council's recommendation.

On March 3, 2008, the Education Committee of the Higher Education Coordinating Board discussed the M.S. and Ph.D. degree program proposal, which was then considered by the full Higher Education Coordinating Board on March 18, 2008. The Board approved the proposal by the Department of Biology at the University of Washington to offer the M.S. and Ph.D. degree programs in Biology.

The 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 Department of Biology proposal to establish the M.S. and Ph.D. degree programs in Biology.