

Adopted: October 28, 2008

**ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, CA**

AS-674-08

**RESOLUTION ON PROPOSED NEW DEGREE PROGRAM
FOR MASTER OF ARTS IN BIOLOGICAL SCIENCES**

- 1 WHEREAS, The Biological Sciences Department has a Master's of Science program in
2 Biological Sciences with both thesis and non-thesis options; and
3
4 WHEREAS, Program reviews in 1995 and 2005 suggested the non-thesis option be replaced
5 with a separate Master of Arts in Biological Sciences; and
6
7 WHEREAS, The current program for the Master's of Science in Biological Sciences is being
8 modified to be a thesis-only degree; and
9
10 WHEREAS, The Biological Sciences Department is proposing to create a master of arts
11 program made up of coursework and a comprehensive exam as the culminating
12 experience; and
13
14 WHEREAS, The College of Science and Mathematics Curriculum Committee and the
15 Academic Senate Curriculum Committee have carefully evaluated this proposal
16 and recommend its approval; therefore be it
17
18 RESOLVED: That the Academic Senate of Cal Poly approve the proposal for a Master of Arts
19 in Biological Sciences and that the proposal be sent to the Chancellor's Office for
20 final approval.

Proposed by: Academic Senate Curriculum Committee
Date: September 12, 2008

Cal Poly, San Luis Obispo

Summary Statement of Proposed New Degree Program for Academic Senate

1. Title of Proposed Program.

Master of Arts in Biology

2. Reason for Proposing the Program.

The last two academic program reviews of the MS Biology (1995 and 2005) suggested the creation of a MA program to replace the non-thesis option in the MS program. The current MS program is being amended to a thesis only degree (see attached curriculum requirements for both MA and MS programs). The proposed MA program will be a coursework-based degree that does not require a research-based thesis and the culminating experience will be a comprehensive written exam covering three areas of biology.

The common interpretation of an MS degree is that of a research thesis-driven degree. By removing the non-thesis option we are making a clear distinction between a thesis-based degree (MS) and a coursework-based degree (MA). By creating a new degree we will be able to specifically recruit students for this MA degree because it is designed to allow interdisciplinary study (more units taken outside of the department) and flexibility of focus for career goals.

We expect the MA program will be most useful for students wishing to enhance a career in teaching biological sciences primarily at the middle school, secondary school, or community college levels and for current teachers who want to move into higher paid positions. It will also be useful for students with career plans in industry and/or civil service where a Master's degree commands a higher starting salary.

3. Anticipated Student Demand.

Over the last ten years, 20 to 30% of our MS students have graduated with the non-thesis option. Incoming classes have averaged between 10 and 20 students with between two to six students choosing the non-thesis program. There are currently 44 active students in the MS Biology program, seven of whom have declared for the non-thesis track. Three non-thesis track students graduated in June 2008. It is expected that the creation of a separate MA degree will enhance our ability to increase overall enrollment since the difference between the two programs will be clearly defined, thus making each more desirable to the appropriate prospective students.

4. **Indicate the kind of resource assessment used by the campus in determining to place the program on the academic plan. If additional resources will be required, the summary should indicate the extent of university commitment to allocate them and evidence that campus decision-making committees were aware of the sources of resource support when they endorsed the proposal.**

All of the faculty currently in the Biological Sciences Department will be involved in this program, just as they are in the current MS program. Current space, facilities, library resources, and academic technology and equipment that support the existing MS program will be available to the proposed MA program. No additional faculty or resources will be needed for the MA Biology program.

5. **If the program is occupational or professional, summarize evidence of need for graduates with this specific education background.**

Not applicable.

6. **If the new program is currently a concentration or specialization, include a brief rationale for conversion.**

Not applicable.

7. **If the new program is not commonly offered as a bachelor's or master's degree, provide compelling rationale explaining how the proposed subject area constitutes a coherent, integrated degree major which has potential value for students. If the new program does not appear to conform to the Trustee policy calling for "broadly based programs," provide rationale:**

The Master of Arts in Biology is a commonly offered program.

8. **Briefly describe how the new program fits with the campus mission.**

Cal Poly Mission Statement. Cal Poly fosters teaching, scholarship, and service in a learn-by-doing environment where students and faculty are partners in discovery. As a polytechnic university, Cal Poly promotes the application of theory to practice. As a comprehensive institution, Cal Poly provides a balanced education in the arts, sciences, and technology, while encouraging cross-disciplinary and co-curricular experiences. As an academic community, Cal Poly values free inquiry, cultural and intellectual diversity, mutual respect, civic engagement, and social and environmental responsibility.

The MA in Biology program is closely aligned with the university's mission. The program is poised to encourage co-curricular experiences with a teaching credential. The inclusion of a project also ensures a hands-on application of knowledge and the additional elective units provide room for students to tailor their program to meet cross-disciplinary aspirations.

ATTACHMENT

CURRICULUM FOR MA BIOLOGICAL SCIENCES

Units

Required courses..... 19

BIO 501 Molecular and Cellular Biology (4)

BIO 502 Biology of Organisms (4)

BIO 503 Population Biology (4)

BIO 590 Seminar in Biology (3)

BIO 500 Individual Study (4)

Electives 26

Additional units at the 400 or 500 level. At least 11 units must be 500-level.

Culminating experience: Satisfactory completion of the comprehensive examinations.

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CURRICULUM FOR MS BIOLOGICAL SCIENCES

Units

Required courses..... 27

BIO 501 Molecular and Cellular Biology (4)

BIO 502 Biology of Organisms (4)

BIO 503 Population Biology (4)

BIO 561 Proposal Writing for Bio Research (3)

BIO 590 Seminar in Biology (3)

BIO 599 Thesis, including oral defense of thesis (3) (3) (3)

Electives 18

Additional units at the 400 or 500 level. At least 3 units must be 500-level.

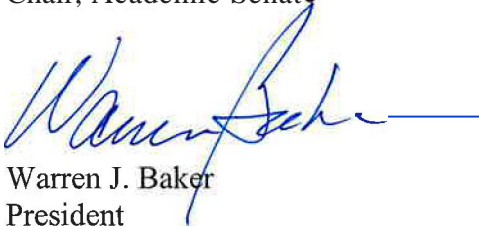
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State of California
Memorandum

To: John Soares
Chair, Academic Senate

Date: November 14, 2008

From: Warren J. Baker
President

A handwritten signature in blue ink, appearing to read "Warren Baker", followed by a horizontal line.

Copies: R. Koob, P. Bailey,
S. Opava, D. Conn,
M. Whiteford

Subject: Response to Academic Senate Resolution AS-674-08
Resolution on Proposed New Degree Program for Master of Arts in Biological Sciences

I am pleased to approve the above-entitled Academic Senate Resolution. The proposal will now be sent to the Chancellor's office for approval.

Please convey my appreciation to the Academic Senate members for their attention to this important curricular matter.