

ACTION ITEM #9
Proposal for New Bachelor's Degree
(Erica Weintraub Austin)

May 6, 2016

TO ALL MEMBERS OF THE BOARD OF REGENTS

SUBJECT: Proposal for New Bachelor of Arts Degree

PROPOSED: That the Board of Regents approve a Bachelor of Arts Degree in Chemistry

SUBMITTED BY: Erica Weintraub Austin, Interim Co-Provost

SUPPORTING
INFORMATION:

According to the Bureau of Labor Statistics' Occupational Outlook Handbook, the projected number of new jobs for Chemists with a Bachelor's degree ranges from 5,000 to 9,999, with a projected growth rate of 9% and a median pay of \$55,000 to \$74,999 (2012 data.) (<http://stats.bls.gov/ooh/home.htm>).

National and state-wide government reports also highlight the need for more STEM majors, especially in terms of STEM education in K-12 education as well as the need for highly skilled workers in the growth area of biotechnology and related fields. The proposed Bachelor of Arts (BA) in Chemistry would allow students to tailor their education by including appropriate courses from other academic areas including biological sciences (Washington State biotech start-ups), criminal justice (forensics), food science (FDA), marketing (scientific sales), and communication (science journalism). Given the flexibility of the proposed BA, second degrees from these complementary academic units can be accomplished in a four-year window.

Addressing the specific shortage of STEM-qualified high school teachers, the New Teacher Project reports, "Washington state universities are not producing enough teachers to meet the growing demand in the coming years, leading to a shortage of nearly 1,000 STEM teachers." Currently, the most common path for a student wishing to teach chemistry at the high school level is to spend four years getting a Bachelor of Science in Chemistry and then enter the intensive MIT program (two summers and two academic semesters) that both lengthens time to degree and increases cost of degree. Very few

students choose to follow this path for these reasons. As such, the College of Arts and Sciences has developed an agreement with the College of Education whereby students pursuing the BA in Chemistry will be able to concurrently complete the education coursework necessary for a Residency Teacher Certificate with an endorsement to teach chemistry in Washington State upon graduation. This program is modeled after the successful Mathematics Education Program at WSU.

In addition, the flexibility of the BA program allows students to pursue a secondary area of specialization and would be prepared to go directly into the job market without graduate training. Targeted jobs include more obvious positions, such as lab technicians in analytical, forensic, and quality control labs, as well as positions in sales and marketing in related industries, including pharmaceuticals, agricultural chemicals, and the chemical industry and science writing. In any of these areas the higher levels of theory provided by the BS degree is not needed, while secondary specializations are appropriate. This could include more coursework in biology, criminal justice, agriculture, communications (advertising), or business. Students can rather easily use the BA in Chemistry as a second major along with a biology, business, or communication degree.

At a meeting on March 22, 2016, the Academic Affairs Committee approved the proposal to create a new degree, the Bachelor of Arts in Chemistry, to be offered on the WSU Pullman campus.

The following were noted and/or addressed during the review process:

- There are two plans offered under the degree
 - Standard
 - Secondary Education
- The degree will be offered only on the Pullman Campus
- Degree approval is dependent upon approval of course revision on UPMCB10

The proposal has support from the Provost, Budget Committee, Catalog Subcommittee, and the Library Committee. The proposal recommends an effective date of fall 2016. This recommendation was passed by the Faculty Senate on April 14, 2016.