Annual Assessment Report
Biological and Chemical Sciences Majors - combined
2015

I. Executive Summary

For this current Assessment report the majors in Biological and Chemical Sciences (Biological and Chemical Sciences (BCS), Biology, Biochemistry and Molecular Biology (BMB), and Chemistry) stayed combined to finish work that we started last year. Our priorities for the 2014-2015 were:

1. Determining which classes should be at the 200-level. Although Biology underwent a major overhaul and changed 200-level courses to 100-level courses, some faculty have thought that this might not be working for all students. This analysis will be done by the Biology/BMB faculty early in the Fall 2014 semester so that any necessary changes will be brought to Curriculum Committee.
    - We determined that Genetics was best taught at the 200-level, after the students have had a year of General Chemistry. This change was approved by the Faculty in the Fall.

2. Determining the impact of the new Health Sciences major will have on the BCS majors. This will be ongoing and be done by all BCS faculty.
    - At the end of the 2014-2016 academic year there were 75 students who had declared one of the BCS majors. In addition, 10 students had declared one of the Health Sciences majors. Six or seven of these 10 would likely have declared a BCS major had the HS majors not been available. Thus, although the HS majors might be seen as "taking away" potential BCS majors, the number of declared BCS majors is at an all-time high. In addition, those HS majors are still taking many of the same courses they would have had they chosen a BCS major, so this has had little or no impact on enrollments in individual courses.

3. Determining if the BCS 301/403 senior capstone experience is working for both the students and the faculty. Currently only several faculty can actually teach in this sequence, which doesn't make it sustainable. This will be done early in the Fall 2014 semester so that changes (if necessary) will be brought to Curriculum Committee.
    - After analysis, we determined that most of our upper division courses now include exercises where the students write and present a paper based on the scientific literature. As this was originally one of unique aspects of BCS 301 this course was no longer filling a need in our curriculum. Thus, beginning in the 2015-2016 academic year we have dropped this course as a requirement for upcoming majors and, beginning in the 2016-2017 academic year will make BCS 403 a four credit Capstone course. Both of these changes were approved by the faculty this year; the reason for the two-year phase-in is to accommodate students who had begun the earlier two-course Capstone

sequence. In the new BCS 403 course, students will be required to write a mini-thesis and present this work to their peers, making this a unique experience. An added bonus to changing BCS 403 from a 2 to 4 semester hour course is that it will now allow one individual to teach it, along with an additional lab course, as part of a full semester load.

4. Updating the current Assessment Plan so that it reflects what we are currently doing. This needs to be done throughout the next year and should reflect the changes to #1 and #3.
    - This is a work in progress. However, we have also sent along new assessment plans for each of our majors.

II. A summary of the group's annual Assessment Review and Planning meeting

We met several times throughout the year to discuss the above changes. Chris Bailey, Kristy Blake, Christina Schmidt and Jackie Schnurr met 2/16/15 to discuss the changes to Genetics, the Biology minor, and BCS 301/403, and on 4/28/15 to discuss implementing assessment plans for each major. We also determined a 4-year course rotation plan to help with planning for the future.

III. The group's plan for what it will focus on in the upcoming year

For the next year we will focus on developing full assessment plans for each of our majors, and on course by course assessments.

IV. An updated Assessment Plan –

These have been split by major and will be sent separately.