Biology Departmental Assessment Meeting: Report Health Sciences Major (HSEC)

Summary of past decisions

The HESC major is more directly career-focused than most Hendrix majors. It provides students with the preparatory curriculum to pursue post-baccalaureate careers in health profession fields such as Physical Therapy, Physicians' Assistant, Occupational therapy, Chiropractic and Nursing. We also have a few students prepare for medical school with this major.

Until two years ago, the health science major was housed in the Kinesiology Department along with a Kinesiology major. For a myriad of reasons, the College decided to drop the Kinesiology Department (and major) but retain the Health Science major, moving it into the Biology Department. As part of this transition, several changes were made to strengthen the major:

- The major in its old form was divided into multiple tracks in an effort to help students prepare for a wide variety of post-baccalaureate options. Because of an excess of tracks, there was no coherent center to the major. By trimming these options, primarily by removing the Public Health track, we are now able to require a group of core courses that ensures that all majors have a strong foundation to build upon for their later coursework.
- All Health Science majors now take a common suite of seven core courses plus four elective courses, two of which must be at the 300-level or higher. Because two of the core courses are 400-level, students must take a minimum four upper level course. In the old track system, some students could graduate with only two upper level courses.
- The Kinesiology Department had only a few faculty, and they were housed in the Wellness and Athletic Center, putting them at some distance from the rest of the faculty. The faculty who teach health science courses are now housed primarily in the same building with the other biology faculty, providing a stronger community for them to work in.

Looking Forward

We now have two years of experience with the Health Science major and have developed a better understanding of how it complements the Biology major in the Biology Department. This experience has allowed us to develop a new set of learning goals and an assessment plan for the major. We can also gather the data to assess how well this revamped Health Science major is preparing students for their career choices.

Health Science Learning Goals

Health Science majors will:

- 1. Appreciate what health science is and how the scientific method is used to increase our understanding of human health.
- 2. Use observations and experimental protocols to make and test hypotheses.

- 3. Apply appropriate analytical and statistical tools for the analysis of data used in the testing of hypotheses and for scientific writing and presentations.
- 4. Study one or more health science fields in depth.
- 5. Be conversant with the major paradigms of health science.
- 6. Participate in a hands-on, in-depth experience in the health science field of their choice.
- 7. Appreciate the place of health science in the liberal arts curriculum and the roles of scientist within society.
- 8. Have developed the intellectual and practical skills to be successful in graduate school, professional school or their chosen field of employment.

Assessment Plan

The career-focused nature of the Health Science major allows for a practical set of assessment measurements. By the end of their Junior year students must have arranged for an internship or research experience that will allow them to gain extensive hands-on experience in their choice of health science fields. This experience includes a written report (that serves as part of the Capstone) and the students also make an oral presentation of their experience during Senior Seminar.

Our assessment of student learning includes:

- Maintaining a portfolio of Capstone papers from the student's senior projects. These papers will include the use of analytical and statistical tools as appropriate.
- Using a rubric to guide grading of student presentations in Senior Seminar. Assessment of student performance will include measures of the student's understanding of major health care paradigms and how professionals in these fields interact with the public.
- Having students fill out a survey regarding their experience with the major.
- Collecting data on the total number and success rates of students who apply to the various graduate and professional programs in the health sciences domain