GENERAL FACULTY

Agenda Item

Date: February 3, 2011

Number: V. I. a.

Subject: Proposed Associate of Science Degree with a major in Laboratory Sciences

Description:

The Associate of Science Degree is designed to develop science laboratory technicians available for the bioscience workforce. These technicians will have a fundamental understanding of the underlying chemical and biological science as well as the necessary scientific laboratory skills to be effective bench scientists. A second group of students served by the degree include students pursuing a Doctor of Pharmacy degree. These students complete the equivalent of two years of coursework prior to admission to pharmacy school.

Approved by Faculty Senate

Financial Implications: None.

Requested Action: General Faculty approval.

Presented By: Dr. Randall Pembrook, Vice President for Academic Affairs

and

Dr. Nancy Tate, Associate Vice President for Academic Affairs
1. Title of program.

**Associate of Science Degree in Laboratory Science**

2. Rationale for offering this program.

*From The Washburn University Strategic Plan (WBoR approved 4/9/2010)*

"Strategic Theme IV, Goal A.3. Develop appropriate programs to support the bioscience initiative in Kansas."

The Associate of Science Degree in Laboratory Science is designed to develop science laboratory technicians available for the bioscience workforce. These technicians will have a fundamental understanding of the underlying chemical and biological science as well as the necessary scientific laboratory skills to be effective bench scientists.

A second group of students will also be served by this degree. Students pursuing a Doctor of Pharmacy complete the equivalent of two years of coursework before admission to pharmacy school. At Washburn University, this pre-pharmacy coursework is more than sufficient in quantity and rigor to warrant the awarding of an Associate of Science degree. Currently, the large majority of pre-pharmacy students leave Washburn University with no degree to show for their body of work completed.

A student who completes the degree will have completed at least the following science courses as well as the other university requirements common to all Associate degrees listed on page 74 of the 2010-2011 Washburn University Catalog:
Courses in Chemistry
CH 151 Fundamentals of Chemistry I 5 credits
CH 152 Fundamentals of Chemistry II 5 credits
CH 340 Organic Chemistry I 3 credits
CH 342 Organic Chemistry Laboratory 1 2 credits
One of the three options
CH 320 Analytical Chemistry 3 credits
CH 321 Analytical Chemistry Laboratory 1 credit
or
CH 341 Organic Chemistry II 3 credits
CH 343 Organic Chemistry Laboratory II 2 credits
or
CH 350 Biochemistry I 3 credits
CH 351 Biochemistry Laboratory I 2 credits
Total in department 19-20 credits

Cognate courses
MA 116 College Algebra 3 credits
BI 102 General Cellular Biology 5 credits
BI 301 General Microbiology 4 credits
Biology elective with lab 3-5 credits
Total cognate 15-17 credits

3. Exact proposed catalog description.

The Departmental Mission and Student Learning Outcomes are as already stated in the catalog. The following will be added under “THE MAJOR.”

AS In Laboratory Science – in addition to the university requirements common to all Associate degrees, at least 19 hours in the department are required, including the following courses and their prerequisites: Chemistry 342, one course from (320, 341, and 350), and one correlated laboratory course from (321, 343, and 351). Cognate course requirements are at least 12 hours in Biology including the following courses and their prerequisites: BI 301 and one laboratory containing course from (105, 110, 255, 275, 325, 333, and 354).

Students who are preparing for admission to a pharmacy school would complete the AS in Laboratory Science including the following recommended courses. CH 151, 152, 340, 341, 342, 343, BI 102, 250, 255, 301, MA 141, CN 101, PS 101 (or a high school Physics course with a grade of B or better), EC 200, PY 100, and a literature course in English.

4. List any financial implications.

none