

5-JD-;2-

sequence  
degree

TITLE: Bachelor of Arts in Chemical Biology

EFFECTIVE: Fall 2011 or ASAP

DESCRIPTION:

Chemical Biology investigates ways in which chemistry may be used to solve biological questions. Research in chemical biology focuses on small molecules in order to understand the fundamental aspects of living systems using chemical <sup>inin</sup>



Organic Chemistry and will serve as the prerequisite course for further studies of biochemical pathways (CHEM 328). In addition, CHEM 324, Organic Chemistry II, will be revised to build on the material presented in CHEM 323. CHEM 324 will expand discussion to include other functional groups and explore reaction mechanisms in more detail. Traditional chemistry majors could replace the CJ-DEM 223/224 sequence with CHEM 323/324.

CHEM 234 Chemical Biology Laboratory - this updated and revised second semester course will incorporate new experiments into a mature synthetic curriculum. The first semester course, CHEM 233, will introduce the techniques of chemical synthesis and will be applicable to both Chemical Biology majors and Chemistry majors. CHEM 234 will be offered in two "flavors": the traditional

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# CHEMICAL BIOLOGY BACHELOR OF ARTS

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FALL SEMESTER- Year 1

SPRING SEMESTER- Year 1

61  
25  
36  
TOTAL 122 CREDITS

1. How is the proposed program important to the department?
  - a. Discuss

A large, empty rectangular box with a thin black border, positioned in the lower right quadrant of the page. It is intended for the student to provide a detailed discussion in response to the question above.



discussions. The revised CHEM 323 will be required



the program in such categories as external and internal grants, philanthropy and other non-grant external funding, and tuition.

There are currently 150 undergraduate chemistry majors in any given year within the department. Seventy-five percent of these are BA majors. We anticipate growing the undergraduate chemistry major by 30% as a result of this degree. This estimate is based on



- b. involve internationalization?

While no specific objective has indicated an emphasis on internationalization, this program will attract significant attention and may serve as a recruiting tool for international students and collaborators.

- c. involve other units?

As described earlier, this new major represents collaboration with other departments and schools within the university. While this degree is granted by the College of Arts and Sciences, specifically, the chemistry department, students in this program will be taking classes and doing research across the university and at the Cleveland Clinic.

- d. increase the university's impact by advancing our academic programs?

Any new program that is the

