



CATALOG YEAR 2013-2014

COLLEGE/SCHOOL/SECTION: COAS Biology & Chemistry

Course: Add: Delete:

(check all that apply) Change: Number Title SCH Description Prerequisite X

Response Required: New course will be part of major minor as a required or elective course

Response Required: New course will introduce , reinforce , or apply concepts

If new, provide Course Prefix, Number, Title, **Measurable** Student Learning Outcomes, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current online catalog, provide change and attach text with changes in red and provide a brief justification.

Program: Delete: Add: Change: Attach new/changed Program of Study description and 4-year plan. If in current online catalog, provide change and attach text with changes in red.

Program Learning Outcomes: Add: Change: Attach listing of program learning outcomes.

Minor: Add: Delete: Change: Attach new/changed minor. If in current online catalog, provide change and attach text with changes in red.

College Introductory Pages: Add information: Change information: Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Other: Add information: Change information: Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Justification: Current prerequisites unjustified and unnecessary for successful completion of upper division courses. Allows BSIS with certification students to take necessary upper division courses.

Approvals:	Signature	Date
Chair Department Curriculum Committee	_____	_____
Chair Department	_____	_____
Chair College Curriculum Committee	_____	_____
Dean	_____	_____

BIOL 3406

Evolution

Four semester hours. (FL)

Genetic and ecological basis of evolutionary changes within populations of plants and animals. Historical, morphological, biochemical, behavioral, and biogeographical evidence will be considered. ~~A discussion section is required.~~ Prerequisite: BIOL [1406](#) and BIOL [1411](#), [1413](#) or [2421](#)..

BIOL 3412

Cell Biology

Four semester hours.

An introduction to the structure and function of eukaryotic cells. Emphasis is placed on the biochemical and biological characteristics of macromolecules and organelles. The major experimental tools used in modern cell biology are presented in the context of research. Topics include membranes, structure and function of proteins, energy conversion, the maintenance of cellular compartments, and transmembrane and cell-cell signaling. Prerequisites: BIOL [1406](#) and BIOL [1411](#), BIOL [1413](#) or BIOL [2421](#) and CHEM [2423](#) or permission of instructor. Lab fee: \$27.25.

BIOL 3413

Introduction to Genetics

Four semester hours.

A study of the basic principles of the science of heredity, with an emphasis in classical and molecular genetics. Classical and molecular approaches are discussed as applied to a range of organisms from bacteria to man. Prerequisites: BIOL [1406](#) and BIOL [1411](#), BIOL [1413](#) or BIOL [2421](#) and CHEM [2423](#) or permission of instructor. Lab fee: \$27.25.