

B.S. in Biochemistry**Student** _____**Degree Checklist****Advisor** _____**1. LIBERAL STUDIES REQUIREMENTS****A. Learning Skills: English composition** 7 cr

		DATE	GRADE
ENGL 101 College Writing	4 cr	_____	_____
ENGL 202 Research Writing	3 cr	_____	_____

B. Learning Skills: Mathematics 6 cr

		DATE	GRADE
MATH 125 Calculus I	3 cr	_____	_____
MATH 126 Calculus II	3 cr	_____	_____

C. Humanities 9 cr

One course in history, one in literature, and one in philosophy or religious studies.

HISTORY DATE GRADE

HIST 195 The Modern Era	3 cr	_____	_____
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LITERATURE

ENGL 121 Humanities Literature	3 cr	_____	_____
FNLG 121 Humanities Literature	3 cr	_____	_____

PHILOSOPHY OR RELIGIOUS STUDIES

PHIL 101 Informal Logic: Methods of Critical Thinking	3 cr	_____	_____
PHIL 120 Introduction to Philosophy	3 cr	_____	_____
PHIL 221 Symbolic Logic I	3 cr	_____	_____
PHIL 222 Ethics	3 cr	_____	_____
PHIL 223 Philosophy of Art	3 cr	_____	_____
RLST 100 Introduction to Religion	3 cr	_____	_____
RLST 110 World Religions	3 cr	_____	_____
RLST 250 Understanding the Bible	3 cr	_____	_____
RLST 290 Christianity	3 cr	_____	_____

D. Fine Arts 3 crOne course selected from the list below: DATE GRADE

ARHI 101 Introduction to Art	3 cr	_____	_____
DANC 102 Introduction to Dance	3 cr	_____	_____
MUHI 101 Introduction to Music	3 cr	_____	_____
THTR 101 Introduction to Theater	3 cr	_____	_____

E. Natural Science

8 cr

		DATE	GRADE
PHYS 131 Physics I-Calculus	3 cr	_____	_____
PHYS 141 Physics I-Calculus Laboratory	1 cr	_____	_____
PHYS 132 Physics II-Calculus	3 cr	_____	_____
PHYS 142 Physics II-Calculus Laboratory	1 cr	_____	_____

F. Social Science

9 cr

Three courses selected from the list below. No course prefix may be used more than once. At least one must be a Non-Western Cultures course (*)

		DATE	GRADE
ANTH 110 Contemporary Anthropology*	3 cr	_____	_____
ANTH 211 Cultural Anthropology*	3 cr	_____	_____
ANTH 213 World Archaeology	3 cr	_____	_____
CRIM 101 Crime and Justice Systems	3 cr	_____	_____
ECON 101 Basic Economics	3 cr	_____	_____
ECON 121 Principles of Macroeconomics	3 cr	_____	_____
GEOG 101 Intro. to Geography: Human Environment	3 cr	_____	_____
GEOG 102 Geography of U. S. and Canada	3 cr	_____	_____
GEOG 104 Geography of the Non-Western World*	3 cr	_____	_____
JNRL 105 Journalism and the Mass Media	3 cr	_____	_____
PLSC 101 World Politics*	3 cr	_____	_____
PLSC 111 American Politics	3 cr	_____	_____
PSYC 101 General Psychology	3 cr	_____	_____
SOC 151 Principles of Sociology	3 cr	_____	_____
SOC 231 Contemporary Social Problems	3 cr	_____	_____

G. Health and Wellness

One course

3 cr

		DATE	GRADE
FDNT 143 Nutrition and Wellness	3 cr	_____	_____
HPED 143 Health and Wellness	3 cr	_____	_____
NURS 143 Healthy People	3 cr	_____	_____

An alternative is the completion of one year of Military Science/ROTC (MLSC 101/102 or MLSC 203/204; 4 cr). Veterans are given 4 cr towards these requirements by validating two years active duty via form DD214.

H. Non-Western Cultures

This requirement is met by one of the courses marked with an * in Section 1F.

I. Synthesis

One course

3 cr

Prerequisite: 73 or more credits earned. A selection of topics is available each semester and summer session. Schedule the course during the senior year, or at least no earlier than the last half of the junior year

		DATE	GRADE
LBST 499 Senior Synthesis	3 cr	_____	_____

J. Writing Across the Curriculum

The courses meeting this requirement (BIOL 263, BIOC 480 and 490) are listed under section 2, Science and Mathematics Requirements.

2. SCIENCE AND MATHEMATICS REQUIREMENTS

In order to graduate, a student must have a 2.0 grade point average in their major courses. These courses are indicated by an *.

A. BIOCHEMISTRY 18 cr

		DATE	GRADE
BIOC 301 Biochemistry I*	3 cr	_____	_____
BIOC 311 Biochemistry Laboratory I*	1 cr	_____	_____
BIOC 302 Biochemistry II*	3 cr	_____	_____
BIOC 312 Biochemistry Laboratory II*	1 cr	_____	_____
BIOC 401 Lab Methods in Biology and Biotechnology*	3 cr	_____	_____
BIOC 481 Special Topics in Biochemistry I*	3 cr	_____	_____
BIOC 482 Independent Research in Biochemistry*	2 cr	_____	_____
BIOC 480 Biochemistry Seminar I (writing intensive)*	1 cr	_____	_____
BIOC 490 Biochemistry Seminar II (writing intensive)*	1 cr	_____	_____

(BIOC 480 and BIOC 490 together count as one writing intensive course)

B. CHEMISTRY 23 cr

		DATE	GRADE
CHEM 113 Concepts in Chemistry I*	4 cr	_____	_____
CHEM 114 Concepts in Chemistry II*	4 cr	_____	_____
CHEM 231 Organic Chemistry I*	4 cr	_____	_____
CHEM 232 Organic Chemistry II*	4 cr	_____	_____
CHEM 323 Analytical Methods*	4 cr	_____	_____
CHEM 340 Physical Chemistry for Biological Sciences*	3 cr	_____	_____

CHEM 111/112 are acceptable substitutes for CHEM 113/114 for students declaring a Biochemistry major after completion of one or both courses.

C. BIOLOGY 10 cr

		DATE	GRADE
BIOL 111 Principles of Biology I*	4 cr	_____	_____
BIOL 250 Principles of Microbiology*	3 cr	_____	_____
BIOL 263 Genetics (writing intensive)*	3 cr	_____	_____

D. ADDITIONAL SCIENCE AND MATHEMATICS 9-11 cr

		DATE	GRADE
MATH 225 Calculus III (not required for students who have completed MATH 123 + 124)	3 cr	_____	_____

Two additional courses chosen from any 300- or 400-level BIOL or CHEM courses or MATH 216 or COSC 110 (minimum of 6 cr total):

_____	__ cr	_____	_____
_____	__ cr	_____	_____

3. FREE ELECTIVES

May include mathematics needed before taking required course or any other courses to give a total of 120 credits.

		DATE	GRADE
_____	__ cr	_____	_____
_____	__ cr	_____	_____
_____	__ cr	_____	_____
_____	__ cr	_____	_____
_____	__ cr	_____	_____
_____	__ cr	_____	_____

BIOL 151 and BIOL 331 are strongly recommended for students intending to apply to medical schools. BIOL 151 must be taken as a Free Elective; BIOL 331 may be used towards the Additional Science and Mathematics requirement.

Summary of Credit Requirements for B.S. in Biochemistry

1. Liberal Studies Requirements	48 cr
3. Science and Mathematics Requirements	60-62 cr
4. Free Electives	<u>10-12 cr</u>
Total Credits Required:	120 cr