Salem | STATE UNIVERSITY

Name:_____
Student ID: _____
Date Admitted Into Major:_____

BACHELOR OF SCIENCE
BIOLOGY

† **MEDICAL TECHNOLOGY CONCENTRATION**

GENERAL EDUCATION REQUIREMENTS

Competencies

☐	♦ Basic College Math
☐	♦ Reading Comprehension

♣General Education Categories (34-35 credits total)

♦FYS	First Year Seminar				3	
♦W-I	Written Communication - Level I				3	
♦OC	Oral Communication				3	
PGR	Personal Growth & Responsibility				3	
CEA	Creative Expression & Appreciation				3	
WC	World Cultures				3	
HP	The Human Past				3	
CS	Contemporary Society				3	
SR	Scientific Reasoning:	♯ Any SR course			3-4	
		♯ SR Lab course			4	
QR	Quantitative Reasoning				3	

‡ Written Communication (Level II and Level III)

W-II	Written Communication - Level II			☐
W-III	Written Communication - Level III			☐

Free Electives/minor (0 credits minimum total)

May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.

COURSES IN MAJOR (76-78 credits total)

Required (46 credits)

BIO	131	Introduction to Organisms	4	
BIO	132	Introduction to Cells	4	
BIO	200	Anatomy and Physiology I	4	
BIO	201	Anatomy and Physiology II	4	
BIO	208	Environmental Problems	3	
BIO	212	Cell Biology	4	
BIO BIO BIO	411 OR 313 OR 316	Immunology Molecular Biology Parasitology	4	
BIO	402	Genetics	4	
BIO	406	Microbiology	4	
BIO	409	Biological Chemistry	4	
BIO	415	Biology Seminar	3	

¶ Elective (3-4 credits)

BIO		Biology elective	3-4	

♥ Required Support Courses (18-19 credits total)

MAT	110 or 220	Pre-calculus or Calculus I	3-4	
◊ PHS	211A or 221	College Physics I or General Physics I	4	
◊ PHS	212A or 222	College Physics II or General Physics II	4	
CHE	420	Instrumental Analysis	4	

Required minor Chemistry **(16 credits total)**

CHE	130	General Chemistry I	4	
CHE	131	General Chemistry II	4	
CHE	212	Organic Chemistry I	4	
CHE	213	Organic Chemistry II	4	

♥ Students may choose to use support courses to satisfy general education categories, but may not be required to do so. **Note:** If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does **not** reduce the credit total required for graduation.

♣ Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.

♯ These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.

‡ Level II and Level III Written Communications Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

† It is strongly recommended that students seek medical laboratory experience through entry-level work or an internship in the sophomore or junior year. Internship placements are *not* made by the university. Interested students should speak to their Academic Advisor and Career Services for coaching. Note: some external internships require a GPA minimum for applicants.

¶ Electives within the major are to be chosen from 300 to 400 level courses, exclusive of BIO 304, 324, and 328. A maximum 4 credits from BIO 407, 408 416,418, 420, or 422 may be used to fulfill one Biology elective; additional credits will count as Free Electives. Secondary Education minors must elect BIO 320, and one course in Geological Science.

◊ The sequence can be either PHS 211A and 212A, or PHS 221 and 222.

♦ COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS	♦ GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

Total credits for graduation: 120

Effective 9/2016