### THE UNIVERSITY OF RHODE ISLAND

Medical Laboratory Science - BS	Student:	
EL_CLSC_BS	Student ID:	
120 Earned Credits Total	Advisor:	

### **ABOUT THE BS in MEDICAL LABORATORY SCIENCE:**

The Medical Laboratory Science major is concerned with the diagnosis, treatment, and prevention of disease using analytical methods in the clinical laboratory. The clinical program includes lecture and laboratory instruction in clinical chemistry, clinical microbiology, hematology, immunology, immunohematology and molecular pathology, and prepares the student for the national certification examinations and state licensure. web.uri.edu/cmb/medical-laboratory-science.

# **Step 1:** REVIEW YOUR PROGRAM REQUIREMENTS

### **INTRODUCTION Requirement: (2 credits)**

Course	Semester	Credits	Grade
MLS 102		1	
URI 101		1	

### **BIOLOGY Requirement: (16 credits)**

Course	Semester	Credits	Grade
*BIO 101		3	
*BIO 103		1	
*BIO 102		3	
*BIO 104		1	
BIO 220		3	
BIO 221		1	
BIO 222		3	
BIO 223		1	

### **CHEMISTRY Requirement: (12 credits)**

Chemistry Requirement: (12 creates)							
Course	Semester	Credits	Grade				
CHM *101		3					
CHM 102		1					
CHM 112		3					
CHM 114		1					
CHM 124		3					
CHM 126		1	·				

### MATH Requirement: (7-8 credits)

Select 1 of the following sequences:

Course	Semester	Credits	Grade				
*MTH 111		3					
STA 308		4					
OR							
*MTH 131/141		3-4					
STA 307/308		4					

### PHYSICS Requirement: (4 credits)

Course	Semester	Credits	Grade
*PHY 111		3	
*PHY 185		1	

### CMB and MLS CONCENTRATION COURSES (20 credits)

Course	Semester	Credits	Grade					
CMB 201 (preferred) or 211		4						
CMB 311		3						
CMB 333		3						
CMB 352		4						
MLS 360		3						
*MLS 483		3						

### **PROFESSIONAL ELECTIVE COURSES (6 credits)**

Any 2: BIO 341, CMB 320, 334, 432, 435, 437

Course	Semester	Credits	Grade
		3	
		3	

### \*\*MLS CLINICAL INTERNSHIP COURSES (32 credits)

Course	Semester	Credits	Grade
MLS 405		2	
MLS 409		4	
MLS 411		4	
MLS 413		2	
MLS 415		3	
MLS 451		2	
MLS 406		2	
MLS 410		4	
MLS 412		4	
MLS 414		2	
MLS 416		3	

### **FREE ELECTIVES:**

Course	Semester	Credits	Grade

<sup>\*</sup>Course approved for general education.

Effective: 2022-2023

<sup>\*\*</sup>Important Note: The senior year clinical internship (MLS 405-451) has limited placements and acceptance is competitive. Application to the MLS admissions committee occurs at the beginning of the junior year; a minimum overall GPA and math/science GPA of ≥2.5 is required to be considered for the application process. The actual minimal GPA required for acceptance may be higher than 2.5; it is dependent upon the number of applicants and the number of internship placements. Students who do not meet the minimum 2.5 requirement to apply, or who are not accepted into the internship are advised to meet with an academic or professional advisor to determine a new course of study.

# THE UNIVERSITY OF RHODE ISLAND

Medical La	aboratory	Science -	B.S.				Student:			
120 Earned	Credits To	tal					Student ID:			
							Advisor:			
<b>General Ed</b>	ducation (	Guideline	<u>s:</u>							
General ed	ucation is 4	10 credits.	Each o	of the twelve	outcome	es (A1-D1) m	ust be met by at least 3 credits. A single	course may	,	
							he 40 credit total. At least one course m	_		
							urse code. General education courses m			
used to me	et requirer	nents of tl	he maj	jor or minor	when app	propriate.				
LIST COURS	ES THAT IV	IEET GENE	RAL E	DUCATION:			LIST COURSE AS EACH OUTCOME IS	MET:		
	Ger	neral Educ	ation (	Credit Count			<b>General Education Outcome Audit</b>			
	At least 4	0 credits,	no mo	re than 12 cr	edits			Course	Grade	
	v	vith the sa	me co	urse code			KNOWLEDGE		•	
Course	Credits	Grade		Course	Credits	Grade	A1. STEM			
							A2. Social & Behavioral Sciences			
							A3. Humanities			
							A4. Arts & Design			
							COMPETENCIES			
							<b>B1.</b> Write effectively			
							<b>B2.</b> Communicate effectively		1	
							<b>B3.</b> Mathematical, statistical, or			
							computational strategies			
							<b>B4.</b> Information literacy			
							RESPONSIBILITIES			
							C1. Civic knowledge &			
				Total Gen			responsibilities			
				Ed Credits			C2. Global responsibilities			
		<u> </u>					C3. Diversity & Inclusion		1	
NOTE: BECAL	ISE MOST C	OURSES M	FFT MC	ORE THAN ON	FOUTCOM	IF YOUR	INTEGRATE & APPLY			
				BEFORE YOU F		-	<b>D1.</b> Ability to synthesize	1	T	
CREDITS. HO	WEVER, YO	U MUST ST	ILL CON	ΛPLETE 40 CRE	DITS OF G	ENERAL	GRAND CHALLENGE		•	
EDUCATION										
*course fulf	fills genera	l educatio	n and	a major requ	irement		<b>G.</b> At least one course of your 40			
	J						credits is an approved "G" course			
The require	ment for t	ransfer to	CELS o	out of Univer	sity Colle	ge for Acade	mic Success:			
Minimum 2					•	•				
Advising N	lotes:									
								-		
								-		
								-		
								-		
								-		
								-		
								-		

Minimum 2.0 cumulative GPA required in major for graduation.

Effective: 2022-2023

# B.S. Medical Laboratory Science Sample 4 Year Plan - Effective Fall 2022 College of The Environment and Life Sciences

### Freshman Year Fall Semester

#### **Course Code** Cr Description Cum Cr **URI 101** Planning for Academic Success 1 \*BIO 101/103 4 Principles of Biology I/Lab \*CHM 101/102 General Chemistry I/Lab 4 \*MTH 111 OR 131 Precalculus or Applied Calculus I 3

### Freshman Year Spring Semester

Course Code	Description	Cr	Cum Cr
*BIO 102/104	02/104 Principles of Biology II/Lab		
*CHM 112/114	General Chemistry II/Lab	4	
MLS 102	Intro to Clinical Lab Sci	1	
STA 307 OR 308	Intro. Statistics or Intro. Biostatistics	4	
	*General Education Course	3-4	
		16-17	31-33

Year 1 Milestones: Complete BIO 101/103, 102/104, CHM 112/114, MLS 102, MTH 111 OR 131 and STA 307 OR 308. Earn 30 credits with a cumulative GPA of 2.0 or higher.

3-4

15-16

15-16

## Sophomore Year Fall Semester

\*General Education Course

Course Code	Description	Cr	Cum Cr
BIO 220/221	Anatomy & Physiology I lecture/lab	4	
CHM 124	Intro. to Organic Chemistry	3	
CHM 126	Lab for CHM 124	1	
*PHY 111/185	General Physics I, Lab	4	
	*General Education Course	3-4	
		15-16	46-49

### Sophomore Year Spring Semester

Course Code	Description	Cr	Cum Cr
BIO 222/223	Anatomy & Physiology II lecture/lab	4	
CMB 201 OR *211	Introductory Medical Microbiology OR Integrative Microbiology	4	
MLS 360	Fundamentals of the Medical Laboratory	3	
	*General Education Course	3-4	
		14-15	60-64

Year 2 Milestones: Complete CMB 201 OR 211, BIO 220/221, 222/223, CHM 124/126, MLS 360 and PHY 111/185. Meet with a MLS Faculty advisor to discuss research/internship opportunities and plan year 3 and 4 courses. Earn 60 total credits with a cumulative GPA of 2.5 or higher.

# Junior Year Fall Semester

Course Code	Description	Cr	Cum Cr
CMB 333	Immunology & Serology	3	
MLS 483	Intro Diagnostic Microbiology	3	
	Professional Elective Course	3	
	*General Education Course	3-4	
	*General Education Course	3-4	
		15-17	75-81

# Junior Year Spring Semester

camer real opining competer			
Course Code	Description	Cr	Cum Cr
CMB 352	General Genetics	4	
CMB 311	Introductory Biochemistry	3	
	Professional Elective Course	3	
	*General Education or Elective	3-4	
	*General Education or Elective	3-4	
		16-18	91-99

Year 3 Milestones: Complete CMB 333, 311, 352, MLS 483 and two professional electives. Apply for placement in the clinical internship during the fall semester. Meet with a MLS Faculty advisor to discuss year 4 courses. Earn 90 total credits with a cumulative GPA of 2.5 or higher. Prepare intent to graduate with faculty advisor for fall submission.

### Senior Year Fall Semester

-	Senior Fear Fair Semester		
Course Code	Description	Cr	Cum Cr
MLS 405	Molecular Pathology	2	
MLS 409	Clinical Microbiology I	4	
MLS 411	Clinical Chemistry I	4	
MLS 413	Immunohematology I	2	
MLS 415	Hematology I	3	
MLS 451	Prof Topics in Clin Lab Science	2	
		17	108-116

### Senior Year Spring Semester

Course Code	Description	Cr	Cum Cr
MLS 406	Clinical Immunology	2	
MLS 410	Clinical Microbiology II	4	
MLS 412	Clinical Chemistry II	4	
MLS 414	Immunohematology II	2	
MLS 416	Hematology II	3	
		15	123-131

Year 4 Milestones: Complete MLS internship. Earn total 120 credits with a cumulative GPA of 2.5 or higher. Minimum 2.5 cumulative GPA in CMB/MLS concentration courses.