

# B.S. IN CLINICAL LABORATORY SCIENCES WITH A CONCENTRATION IN MEDICAL LABORATORY SCIENCE (CL.MLS.BS)

Code	Title	Credits
<b>Major Requirements/Clinical Lab Sciences Core (41 credits)<sup>1</sup></b>		
CE-111	General Chemistry I	3
CE-111R	General Chemistry I Recitation	1
CE-111L	General Chemistry Laboratory I	1
CE-112	General Chemistry II	3
CE-112R	General Chemistry II Recitation	1
CE-112L	General Chemistry Laboratory II	1
CE-241	Organic Chemistry I	3
CE-241L	Organic Chemistry Laboratory I	1
CE-242	Organic Chemistry II	3
CE-242L	Organic Chemistry Laboratory II	1
BY-110	Introduction to Cell and Molecular Biology	4
BY-211	Physiology with Anatomy I	4
BY-212	Physiology with Anatomy II	4
BY-223	General Microbiology	4
CE-333	Biochemistry	3
CE-333L	Biochemistry Laboratory	1
BY-431	Immunology	3

(Science courses satisfy Natural Science (NS) in General Education)

## Interdisciplinary Requirements (6-7 credits)

One of the following three courses 3-4

MA-115 Pre-Calculus Modeling for the Biological Sciences<sup>2</sup>

MA-116 Calculus for the Biological Sciences

MA-125 Calculus with Analytic Geometry I

and

MA-151 Statistics with Applications 3

(MA-115 or MA-151 satisfies Mathematics in General Education)

## Professional Credits (45 credits)

Completion of 83 credits of pre-professional credits is followed by an internship at Rutgers, School of Health Related Professions. Will count as partial fulfillment of WT requirement. 45

## Free Electives (0 credits)<sup>3</sup>

The number of required electives, if any, should be determined with your advisor.<sup>3</sup>

## General Education Requirements (36 credits)<sup>4</sup>

Complete 36 credits as outlined on the General Education table.<sup>4</sup> 36

**Total Credits 128-129**

<sup>1</sup> Students who have not completed all core requirements with a "C" grade or better will be ineligible for admission to the required internship program at Rutgers-SHRP.

<sup>2</sup> MA-116 Calculus for the Biological Sciences (3 cr.) or MA-125 Calculus with Analytic Geometry I (4 cr.) are to be taken by students who score 4 on the Math Placement Exam.

<sup>3</sup> Please consult with your advisor regarding the required number of free electives that must be completed.

<sup>4</sup> The General Education curriculum requires the completion of 45 credits. However, students may be able to share credits from within their major or interdisciplinary requirements. Please consult with your advisor to determine which General Education (<http://catalog.monmouth.edu/undergraduate-catalog/academic-programs-support-services-regulations/general-education-requirements/>) courses must be completed. The order given in the sequence charts for Gen\*Ed courses is advisory. Students may move those courses around to suit their interests.

<sup>5</sup> Students can take BY-216 in place of IT-102 but there will be an additional credit since BY-216 is a 4-credit course. Students are therefore encouraged to consult their advisors.

## Notes

- 54 credits must be completed at the 200 level or higher.

## B.S. in Clinical Laboratory Sciences with a Concentration in Medical Laboratory Science Sequence Chart

First Year		Semester Credits		14-15 Semester Credits		15	
Fall	Credits	Spring	Credits	Fall	Credits	Spring	Credits
CE-111 General Chemistry I	3	CE-112 General Chemistry II	3				
CE-111R General Chemistry I Recitation	1	CE-112R General Chemistry II Recitation	1				
CE-111L General Chemistry Laboratory I	1	CE-112L General Chemistry Laboratory II	1				
Mathematics Interdisciplinary Course (Please see curriculum chart)	3-4	BY-110 Introduction to Cell and Molecular Biology	4				
EN-101 College Composition I	3	EN-102 College Composition II	3				
IT-102 Information Technology for Scientists <sup>5</sup>	3	Gen*Ed Social Science	3				
<b>Semester Credits</b>		<b>14-15 Semester Credits</b>				<b>15</b>	
Second Year		Semester Credits		14 Semester Credits		14	
Fall	Credits	Spring	Credits	Fall	Credits	Spring	Credits
CE-241 Organic Chemistry I	3	CE-242 Organic Chemistry II	3				
CE-241L Organic Chemistry Laboratory I	1	CE-242L Organic Chemistry Laboratory II	1				
BY-211 Physiology with Anatomy I	4	BY-212 Physiology with Anatomy II	4				
Gen*Ed Historical Persp. or Social Science	3	MA-151 Statistics with Applications	3				
Gen*Ed Literature	3	Gen*Ed Historical Persp.	3				
<b>Semester Credits</b>		<b>14 Semester Credits</b>				<b>14</b>	
Third Year		Semester Credits		14 Semester Credits		14	
Fall	Credits	Spring	Credits	Fall	Credits	Spring	Credits
BY-223 General Microbiology	4	BY-431 Immunology	3				

CE-333 Biochemistry	3 Gen*Ed Interdisciplinary Perspectives	3
CE-333L Biochemistry Laboratory	1 Gen*Ed Cultural Diversity or Global Understanding	3
Gen*Ed World Language	3 Gen*Ed Reasoned Oral Discourse	3
Gen*Ed Aesthetics	3	
<b>Semester Credits</b>	<b>14 Semester Credits</b>	<b>12</b>
<b>Fourth Year</b>		
<b>Fall</b>	<b>Credits</b>	<b>Spring Credits</b>
Clinical Internship RUTGERS-SHRP	23	Clinical Internship RUTGERS-SHRP 22
<b>Semester Credits</b>	<b>23 Semester Credits</b>	<b>22</b>
<b>Total Credits 128-129</b>		