## Accelerated dual degree program: B.S. in Biochemistry + MD CMSRU —sample 4-year sequence

First Semester (Fall)	Credit	Second Semester (Spring)	Credit
CHEM 06.100 Chemistry I-RS	4	CHEM 06.101 Chemistry II	4
MCB 01.101 Foundations in Biology for	4	MCB 01.102 Foundations in Biology for	1
Biomedical Sciences I	4	Biomedical Sciences II	4
MATH 01.130 Calculus I	4	MATH 01.131 Calculus II	4
(Quantitative Literacy)	4	MATH 01.131 Calculus II	4
COMP 01.111 College Comp. I	3	COMP 01.112 College Comp. II	3
Term Total Credit	15	Term Total Credit	15
Summer between years 1 & 2			Credit
Free Elective (Artistic Literacy)			3
Free Elective (PULSE Program Year 1)			3
Third Semester (Fall)	Credit	Fourth Semester (Spring)	Credit
CHEM 07.200 Organic Chemistry I	4	CHEM 07.201 Organic Chemistry II	4
PHYS 00.220 Introductory Mechanics (Scientific Literacy)	4	CHEM 09.250 Quantitative Analysis	4
MATH 01.230 Calculus III or	4		
STAT 02.284 Statistics for Biomedical	or	PHYS 00.221 Intro Electricity and	4
Sciences	3	Magnetism	
CMS 04.205 Public Speaking	3	PSY 01.107 Essentials of Psychology	3
		PHIL 09.376 Philosophy of Medicine	3
SOC 08.120 Intro to Sociology	3	(WI & Humanistic Literacy)	
Term Total Credit	17-18	Term Total Credit	18
Summer between years 2 & 3			Credit
Free Elective (PULSE Program Year 2)			•
			3
2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2			3
Fifth Semester (Fall)	Credit	Sixth Semester (Spring)	Credit
Fifth Semester (Fall)		Sixth Semester (Spring) CHEM 07.407 Advanced Biochemistry	Credit
, , ,	Credit 4		
Fifth Semester (Fall) CHEM 07.348 Biochemistry	4	CHEM 07.407 Advanced Biochemistry	Credit 3
Fifth Semester (Fall)		CHEM 07.407 Advanced Biochemistry Chemistry Lecture	Credit
Fifth Semester (Fall) CHEM 07.348 Biochemistry	4	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry	Credit 3
Fifth Semester (Fall) CHEM 07.348 Biochemistry CHEM 08.305 Biophysical Chemistry	4	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab	Credit 3
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I	4 4 3 3 3	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem)	2 3 3 3
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)	4 4 3	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem)	Credit 3 2 3
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific	4 4 3 3 3	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem)	2 3 3 3
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming	4 4 3 3 3	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar	2 3 3 1
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103	4 4 3 3 3 17	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar	2 3 3 1
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103	4 4 3 3 3 17	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar Term Total Credit	2 3 3 3 1 12
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103	4 4 3 3 3 17	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar Term Total Credit	2 3 3 1
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103  FIRST	4 4 3 3 3 17  YEAR (	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar Term Total Credit	3 2 3 3 1 12 3
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103  FIRST  Fundamentals (Molecular Genetics,  Biochem Restr. Elective)	4 4 3 3 3 17	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar Term Total Credit  CMSRU (Year 4) Lifestages	2 3 3 3 1 12
Fifth Semester (Fall)  CHEM 07.348 Biochemistry  CHEM 08.305 Biophysical Chemistry  CHEM 05.440 Research I  Restricted Elective (Chem)  CS 01.104 Intro to Scientific  Programming  Term Total Credit  Total Credits (Rowan): 103  FIRST  Fundamentals (Molecular Genetics,  Biochem Restr. Elective)	4 4 3 3 3 17  YEAR (	CHEM 07.407 Advanced Biochemistry Chemistry Lecture CHEM 07.409 Advanced Biochemistry Chemistry Lab Restricted Elective (Chem) Restricted Elective (Chem) CHEM 05.450 Seminar  Term Total Credit  CMSRU (Year 4)  Lifestages Infectious Diseases (Biology Rest.	3 2 3 3 1 12 3

Ambulatory Clerkship	3	Skin-Musculoskeletal	6
Weeks on Wards	1	Scholar's Workshop	2
Clinician Clinic/Orientation	1	Foundations of Medical Practice	3
		Ambulatory Clerkship	3
Term Total Credit	22	Term Total Credit	23
Sub-total: 17 s.h.			
Total: 120 s.h.			

Summer between years 4 & 5 (at	GSBS)		Credit	
CMB 00690 Thesis Research (summer)			5	
Formation of Advisory Committee			7	
Term Total Credit (graduate)				
Ninth Semester (at GSBS)	Credit	Tenth Semester (at GSBS)	Credit	
CMB 00805 Cell Culture & Stem Cells	2	CMB 00808 Molecular Oncology (even #	2	
(even # years) OR		years) OR		
CMB 00806 Graduate Genetics (odd #		CMB 008010 Biomolecular Interactions		
years)		(odd # years)		
CMB 00804 Critical Readings	2	CMB 00803 Scientific Writing (even #	2	
		years) OR		
own coor officer readings	_	CMB 00802 Experimental Design (odd #	_	
		years		
CMB 00809 Departmental Seminar	1	CMB 00809 Departmental Seminar Series	1	
Series		CMB 00000 Bepartmental Certifical Certifical	'	
CMB 00699 Thesis Continuation	5	CMB 00801 Bioethics in Science and	2	
		Medicine		
		CMB 00699 Thesis Continuation	5	
Term Total Credit	10	Term Total Credit (graduate)	12	

<sup>\*</sup> indicates a course that is typically only offered in the indicated Fall or Spring term

This document is intended as a guide only. Please consult with your academic advisors to fully plan your course sequence.