

Biological Sciences

St. Charles Community College					University of Missouri-Rolla		
Semester	SCC #	Title	Hours	Grade	UMR #	Title	Hours
First	MAT 180	Calculus & Analytic Geometry I	5		MATH 004	College Algebra	3
	CHM 110	General Chemistry I	3		CHEM 001	General Chemistry	4
	CHM 113	General Chemistry I Lab	2		CHEM 002	General Chemistry Lab	1
	ENG 101	English Composition I	3		ENG 020	Exposition & Argumentation	3
	BIO 101	General Biology	3		BIO 110	General Biology	3
	BIO 103	General Biology Lab	1		BIO 112	General Biology Lab	2
		Humanities/Social Sciences Elective	3			Humanities/Social Sciences Elective	3
		Total Semester Hours		20		Total Semester Hours	19
Second	MATH 230	Calculus & Analytic Geometry II	5		MATH 015	Calculus w/Analytic Geometry II	4
	CHM 111	General Chemistry II	3		CHEM 003	General Chemistry II	3
	CHM 114	General Chemistry Lab II	2		CHEM 008	Qualitative Analysis	2
	BIO 120	Introduction to Ecology	3		BIO 251	Ecology	3
	BIO 240,243	Anatomy and Physiology I and Lab	4		BIO 241	Human Anatomy	5
		Humanities/Social Sciences Elective	3			Humanities/Social Sciences Elective	3
	Total Semester Hours		20		Total Semester Hours	20	
Third	MAT 240	Calculus & Analytic Geometry III	5		MATH 022	Calculus w/Analytic Geometry III	3
	CHM 240	Organic Chemistry I	3		CHEM 221	Organic Chemistry I	3
	CHM 243	Organic Chemistry I Lab	1		CHEM 222	Organic Chemistry Lab	1
	CPT 182	Programming in C	3		GNCR	General Credit	3
	ENG 102	English Composition II	3		ENG 060	Writing and Research	3
		Humanities/Social Sciences Elective	3			Humanities/Social Sciences Elective	3
	Total Semester Hours		18		Total Semester Hours	16	
Fourth	MAT 250	Differential Equations	3		MATH 012	Business Calculus	4
	CHM 241	Organic Chemistry II	3		CHEM 223	Organic Chemistry II	3
	CHM 244	Organic Chemistry II Lab	1		CHEM 224	Organic Chemistry Lab	1
	ECO 110 or	Principles of Macroeconomics or	3		ECON 122 or	Principles of Macroeconomics or	3
	ECO 120	Principles of Microeconomics	3		ECON 121	Principles of Microeconomics	3
	CPT 186	Object Oriented Programming in C++	3		CS 074, 078	Introduction to Programming Methodology and Lab	3
		Humanities/Social Sciences Elective	3			Humanities/Social Sciences Elective	3
		Free Elective	3			Free Elective	3
	Total Semester Hours		19		Total Semester Hours	20	

This is a guide; with the consent of your advisor you may choose to vary the sequence or combination of some courses in a manner appropriate to individual course requirements and prerequisites. A grade of "C" or better is required in calculus and physics.