Biology Major: Option B – Biotechnology and Genetics (B+G)

REQUIRED: CORE COURSES	Hours	OPTION B ELECTIVES	Hours	REQUIRED: BIOLOGY COGNATE COURSES	Hours	GENERAL EDUCATION	Hours
NSM101 1st Yr. Experience	1	**REQUIRED B+G Courses**		Chem105 General Chemistry I	3	Ged100 Origins	3
Bio120 Fundamentals of Bio.	4	Bio341 Microbiology	4	Chem106 General Chemistry II	3	Ged Race & Gender	3
Bio121 Biological Diversity	4	Chem331 Biochemistry	3	Chem107 General Chem. Lab I	2	*International Prespectives (1)	3
Bio250 General Ecology	4	Chem333 Biochemistry Lab	2	Chem108 General Chem. Lab II	2	*International Prespectives (2)	3
Bio270 Genetics	4			Chem205 Organic Chemistry I	3	*History of Civilization	3
Bio385 Cell Biology	4	**PLUS 9-11 hrs. of the following optional courses:**		Chem206 Organic Chemistry II	3	Eng101 English Composition I	3
Bio411 Senior Seminar	1			Chem207 Organic Chemistry Lab I	2	Eng102 English Composition II	3
				Chem208 Organic Chemistry Lab II	2	Eng150 Intro to Literature	3
		Bio345 Virology	3	Phys201 Gen. Physics I	4	*Mathematics	3
		Bio347 Immunology	4	Phys203 General Physics Lab I	1	Comm 100 Speech Communication	3
		Bio350 Evolution	3				
		Bio361 Microbial Genetics	4	Math206 Analytical Geometry & Calculus I	4	*Lifetime Health & Fitness	2
		Bio373 Eukaryotic Molecular Genetics	4	**OR**		*Fine Art (1)	3
						*Fine Art (2)	3
		Bio375 Principles of Aquaculture	4	Math222 Elementary Stats for Math & Natural Sci.	3	American Traditions	3
						Social Structure & Behavior	3
		Bio395 Practicum in Bio.	1			**Natural Science electives	6 - 8
		Bio399 Special Topics in Biology	3 - 4	**Optional/ Recommended Cognate Courses**			
		Bio443 Plant Tissue Culture	4				
		Bio444 Plant Physiology	4	Math206 Analytical Geometry & Calc. I	4		
		Bio460 Environmental Microbiology	4	Phys202 General Physics II	4	*** Caution: only approved GenEd electives count toward this category**	
		Bio466 Cancer Biology	3	Phys204 General Physics Lab II	1		
		Bio490 Directed Student Research	1 - 4				
		Bio491 Undergrad Independent Study	1 - 4			**** Biology Major automatically fulfills this requirement**	
		Bio492 Undergrad Library Research	1 - 2				
		Bio499 Special Topics in Biology	3 - 4				
Total Required Core Hours	**22**	**Total Option B Elective Hours**	**18-20**	**Total Cognate Hours**	**28-29**	**Total Gen.Ed/Elective Hours**	**44**

TOTAL **128 HRS.** FOR GRADUATION