

# Biology Major, Cell Molecular Emphasis

## Bachelor of Science

### FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Req	Title	Crs	Subj/Course	Title	Credits
Biology 105	Biological Concepts: Unity	4	Biol 111	Biology Orientation	2
Math	Math 103 Intermediate Algebra	3	Chem 106	General Inorganic II	5
Chem 105	General Inorganic I	5	GEN ED	Phy. ED. 105	2
GEN ED	WBIS 188	3	Math 171	Calculus I	3
			Biol 230	Biology of Animals	4
TOTAL		15	TOTAL		16

### SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 231	Biology of Plants and Microbes (NS)	4	Biol 323	Introduction to Molecular and Cell Biology	3
Chem 235	Organic I	4	Chem 335	Organic II	4
GEN ED	(SS) Social Science Course	3	GEN ED	(HU) Humanities Course	3
GEN ED	Communication 111	3	GEN ED	(NW) Non-Western Culture Course	3
			GEN ED	(HU) Humanities Course	3
TOTAL		14	TOTAL		16

### THIRD YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 343	Genetics	4	Biol 349	Ecology and Evolution	3
Biol 341	Immunology	3	Biol 389+390**	Biotechnology Lecture/Lab or	5
Biio	Electives	3-5	Biol	Electives	3-5
Chem 303	Biochem I	3	GEN ED	(ES) Ethnic Studies Course	3
GEN ED	(SS) History	3	GEN ED	(SS) Social Science Course	3
			Biol 372	Advanced d Molecular and Cell	3
TOTAL		16-18	TOTAL		15-17

### FOURTH YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Course	Title	Credits	Subj/Course	Title	Credits
Biol 374	Cell Immunology Lab	2	Biol 389+390*	Bioechnology Lecture and Lab or	5
Biol 375+377	Microbial Genetics/Lecture and Lab	5	Biol	Electives	3-5
Biol 319	Animal Physiology	5	GEN ED	(HU) Humanities Course	3
GEN ED	(SS) Social Science Course	3	GEN ED	(HU) Humanities Course	3
			GEN ED	Advanced Composition	3
			Biol 491	Senior Survey	0
TOTAL		15	TOTAL		13-15

BS GEN ED Requirements are as follows: (letters in parentheses are the GEN ED designations for each area)

\* Note: Total number of GEN ED credits required for BS varies as some courses count in more than one area

Communications: Comm 111: 3 crs

English Composition (EN):6 (WBIS 188 plus one Advanced Composition Course)

Humanities (HU):12 (1 course must be a literature course; other courses must be from two out of remaining three Humanities areas.

Mathematics (MA): 3 crs (additional credits may be required for remedial coursework to reach minimum level)

Natural Science (NS): four courses total: see catalog or academic advisor for more details.

Non-Western Culture (NW): 3 crs

Physical Education (PE): 2 crs

Social Science (SS):12 (one course must be in History)

\* If semester falls on an even yr \*\* If semester falls on an odd yr

\*\*\*Note: Students must take two of the following upper level lecture/lab combinations: 341/374. 375/377; 389/390