

# BIOLOGY MAJOR

## Biomedical/Molecular Biology Concentration

2005/06

### GENERAL EDUCATION REQUIREMENTS

#### CHECKLIST

F=Fall S=Spring FS= Fall & Spring

AA=as announced s.h.=semester hours

(3x) =take 3 times

\*=has prerequisite-check the class below it for details

SL=Service Learning DW=Diverse World

SE=Senior Experience

#### You must take the following classes:

	sem.	s.h.
____IDS 499-Major Seminar-each sem	(FS)	1
____IDS 151-Self and Community I	(F)	3
____IDS 152- Self and Community II	(FS)	3
____IDS 111-Writing and Rhetoric I	(F)	3
____IDS 112* Writing and Rhetoric II	(S)	3
*IDS 111 with C or better		
____IDS 211-Civilization Studies I	(F)	3
____IDS 212-Civilization Studies II	(S)	3
____IDS 251-Nature, Tech, and Humanity	(FS)	3

#### Math Proficiency-3 Semester hours

##### Take one class:

____MTH 150-151 Precalculus or Calculus I	(FS)	4
____BIO 406-Biostatistics	(F)	3
____PHA 201-Physics I	(F)	4
____PHA 251*Calculus Based Physics I	(AA)	5
*MTH 150		

#### Science Experience-3 semester hours

##### Take one class:

____SCI 102-Biological Science	(FS)	3
____SCI 103-Astronomy	(FS)	3
____SCI 105-Intro to Geology	(S)	3
____SCI 107-Environmental Science	(F)	3
____SCI 111-Intro to Chemistry	(F)	3
____SCI 112-Intro to Physics	(S)	3
____BIO 111-Prin. of Biology: Molecules to Cells	(F)	3
____BIO 112-Prin. of Bio: Organisms to Ecosystems	(S)	3
____PHA 201-Physics I	(F)	4
____CEM 151 General Chemistry I	(F)	4
____BIO 105-Human Biology	(S)	3

#### Creative Experience-3 Semester hours

##### Take One Class:

____ART 105-Drawing Skills Lab	(S)	3
____ART 107-Visual Foundations	(FS)	3
____ART 200 level or above studio class		3
____ENG145-Intro to Creative Writing	(AA)	3
____ENG 245-Fiction Writing	(F)	3
____ENG 247-Poetry Writing	(S)	3
____MUS 110-College Choir (3x)	(FS)	1
____MUS 112-Women's Chorale(3x)	(FS)	1
____MUS 141-Class Piano I (3x)	(F)	1
____MUS 142-Class Piano II (3x)	(S)	1
____MUS 243-Guitar Techniques (3x)	(FS)	1
____THR 111-Acting	(FS)	3

**Arts Exploration must be taken outside of the major. If one of these courses is required for your major, you must take a different course to satisfy the requirement.**

#### Arts Exploration:

##### Take One Class:

____ART 101-Image and Culture	(F)	3
____ENG 201-Texts and Culture	(FS)	3
____MUS 120-Music and Culture	(FS)	3
____THR 106-Theatre and Culture	(FS)	3

### BIOLOGY—BIOMEDICAL/MOLECULAR BIOLOGY

#### Major requirements 47 s.h.

#### Complete each of the following (35 semester hours):

____BIO 111-Principles of Biology-Molecules to Cells	(F)	3
____BIO 112-Principles of Biology-Organisms to Ecosystems	(S)	3
____BIO 401* Cell Biology	(S)	3
* BIO 111 and CEM 151 and 152		
____BIO 404* Genetics	(S)	3
* BIO 111		
____BIO 406* Biostatistics	(F)	3
* 12 Sem. Hrs. BIO		
____BIO 431* Molecular Biology Tech.	()	3
* CEM 332		
____CEM 151-General Chemistry I	(F)	4
____CEM 152* General Chemistry II	(S)	4
* CEM 151 with C or better		
____CEM 332* Biochemistry I	()	3
* CEM 232		
____CEM 333* Biochemistry II	(F-odd)	3
* CEM 332		
____SCI 421*Senior Seminar in Science SE	(S)	3
* Science major or minor with 75 or more Sem. Hrs.		

#### Complete 12 semester hours from the following:

____BIO 207* Microbiology	(S-odd)	3
* SCI 102 or BIO 111 or 112		
____BIO 303* Developmental Biology	(S)	3
* BIO 111; 112		
____BIO 311* Pathology	(S-even)	3
* BIO 202 or BIO 211/212 or instructor permission.		
____BIO 312* Parasitology	(F-even)	3
* BIO 111 or 112, recommend BIO 150		
____BIO 313-Plant Ecology	(S)	3
* BIO 111 or 112 or 102 or instructor permission.		
____BIO 403* Environmental Health and Toxicology	(S-odd)	3
* BIO 111; 112 or SCI 107 or instructor permission.		
____BIO 415*Research in Biology	1-3	
* by instructor permission.		
____BIO 418*Independent Study SL	1-3	
*by instructor permission.		
____CEM 231-Organic Chemistry I	(F)	4
____CEM 232*Organic Chemistry II	(S)	4
*CEM 231 with C or better		
____PSY 345* Intro to Neuroscience	(F-odd)	3
* PSY 201 or BIO 111 or instructor permission.		
____SCI 410-Topics in Science	(AA)	1-3

\* \_\_\_\_ **Complete a class that satisfies the Diverse World requirement (DW).**

\* \_\_\_\_ **Complete a class that satisfies the Service Learning requirement (SL).**

\* \_\_\_\_ **Complete a class that satisfies the Senior Experience requirement (SE).**

\*Classes for these three requirements may change from year to year-check with the chair of your department.

**Complete an approved minor or electives to reach 120 semester hours for graduation.**

**CLASSES ARE SUBJECT TO CHANGE**