Montana State University - College of Agriculture **Plant Science & Plant Pathology Department**

Program of Study for:

Student ID #:

Biotechnology - Plant Systems Options
2010-2012 Catalog

Required	Cr.	Sem.	Yr.
BIOB 170IN - Prin Bio Diversity (or BIOB 256 S)	4	F,S	
BIOB 105CS- Intro to Biotechnology	3	F	
BIOB 160 - Prin Living Systems (or BIOB 260 F)	4	F,S	
BIOB 375 - Genetics	3	F,S	
CHMY 141 - Gen Chem I	4	F,S,Su	
CHMY 143 - Gen Chem II	4	F,S,Su	
CHMY 211 - Elements Organic Chem **or**	5	F,S	
CHMY 321- Organic Chemistry I **and**	4	F,Su	
CHMY 323- Organic Chemistry II	4	S,Su	
BIOM 360- General Microbiology	5	F,S	
ECNS 101IS- Economic Way of Thinking	3	F,S	
Take either one of the following:			
AGED 105 - Microcomp. in Ag	3	S	
CAPP 120 - Comp. Literacy (in person/online)	3	F,S	
Communications/Math min 1.7 GPA	**Cr.**	**Sem.**	**Yr.**
WRIT 101W - College Writing	3	F,S,Su	
Math- two groups of options			
M 161Q - Survey of Calculus **and**	4	F,S,Su	
BIOB 318 Biometry **or**	3	F	
STAT 216Q- Elementary Statistics	3	F,S,Su	
OR take the following two courses			
M 165Q -Calculus I	3	F,S	
M 166Q -Calculus II	3	F,S	
Junior Year	**Cr.**	**Sem.**	**Yr.**
BCH 380 - Gen Biochem	5	F,S,Su	
BIOB 430 - Plant Biotechnology	3	S even	
BIOO 433 - Plant Physiology	3	S	
HORT 447 - Advanced Plant Propagation	3	F even	
PHSX 205 - College Phys I	4	F,S,Su	
PHSX 207 - College Phys II	4	F,S,Su	
Senior Year	**Cr.**	**Sem.**	**Yr.**
BIOM 421 - Concepts in Plant Pathol	3	S	
BIOB 299 - Plant Biotech Capstone	2	S	
BIOO 460 - Plant Metabolism	3	S odd	
BIOB 498 - Internship	(2-4)	F,S,Su	
Restricted Electives - Choose Five	**Cr.**	**Sem.**	**Yr.**
BCH 441 - Biochem of Macromolec	3	F	
BCH 442 - Metabolic Regulation	3	S	
BIOB 425 - Adv. Cell & Molec Biology	3	S	
BIOB 476R - Gene Construction	3	F	
BIOM 450 - Micro Physiology	3	F	
BIOM 430 - Applied & Env. Microbiology	4	F	
BIOM 410 - Microbial Genetics	3	S	
AGSC 341 - Field Crop Production	3	S even	
AGSC 450 - Plant Disease Control	3	S odd	
BIOM 423 - Mycology	3	F even	
BIOM 424 - Ecology of Fungi	3	F odd	
AGSC 441 - Plant Breeding and Genetics	3	S odd	
BIOO 458 - Plant Cell Physiology	3	F odd	
Choose one of the following:			
BCH 444R - Biochem & Mlclr Bio Mthds (441 1st)	3	S	
BIOM 455 - Research Meth in Microbiol	4	S	

Core 2.0	Cr.	Sem.	Yr.
US			
W			
Q			
D			
CS			
IA/RA			
IH/RH			
IN/RN			
IS/RS			
R			

Substitutions for Required Courses	
Substitute	**For**

120 credits required,
42 minimum upper division
Minimum GPA: 2.0

student signature *date*

advisor signature *date*

dept. certifying officer signature *date*

verify appropriate prerequisites

Revised: 12/9/2011