

	<b>Previous Botany BA</b>	<b>Previous Botany BS</b>	<b>New Major</b>	<b>Recommend*</b>
<b>Mathematics &amp; Statistics</b>	one intermediate calc, or probab/stats	one calc & one intermediate math or comp. science	Statistics 301 or 371	Math 211 or 221
<b>Mathematics:</b> Change for Botany major would be to require Statistics and not calculus. Strongly recommended that most students will take an additional course in calculus. The latter recommendation normally would be fulfilled <b>anyway</b> with a B.S. degree in Botany, as two intermediate level math courses are required in L&S for the B.S. degree.				
<b>Chemistry</b>	103/104 or 109, one organic	103/104 or 109, one organic & one additional organic, biochem, or analytical chem	Chem 103/104 or 109, & Chem 341 or 343	Chem 343, 344, & 345
<b>Chemistry:</b> Change for Botany major is to require one rather than two organic chemistry courses. Advising should stress the one semester organic 341 if only one course is to be taken. However, it is strongly recommended that most students should take the three course organic chemistry sequence as most graduate programs require the sequence.				
<b>Physics</b>	none	103/104 or 201/202 or 207/208	One course (not Physics 107 or 109) (Physics 115 best choice)	Two course sequence: Physics 103/104 or 201/202 or 207/208
<b>Physics:</b> Change for Botany major is to require one (as in previous Botany B.A.) rather than two (as in previous Botany B.S.) physics course sequence. Physics 107 and 109 are taught at the elementary level and are not appropriate. Physics 115 (Energy) may be the best option for the standard Botany program requirement. However, a two course sequence is strongly recommended as most graduate programs require the sequence or at least electricity and light which normally is taught in the second semester of the two course sequence. Physics 103/104 are often taken by pre-meds in order to get better grades. Physics 201/202 has no modern physics, is directed towards engineering students, and is not the best sequence for biologists. Physics 207/208 is dominated by biologists (1/2 of the students).				

**\* For students preparing for Graduate School the following are strongly recommended as these usually are required for entry into post-undergraduate programs**

	<b>Previous Botany BA</b>	<b>Previous Botany BS</b>	<b>New Major</b>	<b>Recommend*</b>
<b>**Introductory Biology</b>				
<b>Option A</b> (5 credits)	Botany 130	Botany 130	Botany 130	
<b>Option B</b> (10 credits)	Biology 151 & 152	Biology 151 & 152	Biology 151 & 152	
<b>*** Option C</b> (10 credits)	Biocore Curriculum	Biocore Curriculum	Biocore 301 & 303 & two lab courses from 302, 304, 324	
<b>Recommended additional Zoology</b>	Zoology 101/102 & I/A Zoology course, up to 5 credits toward major	Zoology 101/102 & I/A Zoology course, up to 5 credits toward major	up to 5 credits of I/A Zoology counts toward major	I/A Zoology course

**\*\*General requirements for the Botany Major presently mandate 30 credits of approved courses. This is maintained.**

**\*\*\*The typical Biocore lecture sequence (taken in order) is: 301: Evolution, Ecology, and Genetics (3 cr), 303: Cellular Biology (3 cr), 323: Organismal Biology (3 cr), and 333: Biological Interactions (3 cr) AND two of the following laboratory courses: 302: Evolution, Ecology, and Genetics Lab (2 cr), 304: Cellular Biology Lab (2 cr), 324: Organismal Biology Lab (2 cr)**

	<b>Previous Botany BA</b>	<b>Previous Botany BS</b>	<b>New Major</b>	<b>Recommend*</b>
<b>Botany Distribution</b>	<b>5 out of 6 areas</b>			
	Genetics 466 <b>OR</b> Biocore 301 & 303	Genetics 466 <b>OR</b> Biocore 301 & 303	Genetics 466 <b>OR</b> Biocore 333	Biochem 501
			<b>4 out of 5 areas</b>	all 5 areas
	Anatomy or Morphology	Anatomy or Morphology	Plant anatomy – Botany 300	
	Ecology <b>OR</b> Biocore 301 & 333	Ecology <b>OR</b> Biocore 301 & 333	Ecology – Botany 455 or 460	
	Physiology <b>OR</b> Biocore 303 & 323	Physiology <b>OR</b> Biocore 303 & 323	Physiology – Botany 500 <b>OR</b> Biocore 323, 304 & 324	
		<b>&amp; either:</b>		
	Crypto botany	Crypto botany	Cryptogamic botany – Botany 330 or 332 or 360 <b>OR</b> Bacteriology 303	
	Taxonomy	Taxonomy	Systematics – Botany 400 or 401 or 422	
<b>****Research</b>	Ind Research	Ind Research	Ind Research	Senior Thesis

**\*\*\*\* Independent Research: 4-6 credits of Senior Thesis [691/692] OR 6 credits of Senior Honor Thesis [681/682] OR 2-4 credits of Senior Composition (taken as Directed Study [699]). 4 credits of Capstone Course in Field Biology [639-640] would satisfy requirement as well, but this course is not always taught.**