

## Academic Program Sequence Map

**Program Degree Type and Name:** Biology Education Track BS + MS in Education - BIEM Catalog Year: 2022-2023

**Program Level:** Undergraduate **Academic Term Type:** Semester

*\* Denote core course with an asterisk and (cc) next to the course number*

Year and Term: Year 1 Fall Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
MATH 116	3	X				
ENGL 111: Written ENGL and Lit Studies	3	X				
ENGL 110 or Gen Ed	3	X			Co: ENGL 111	
CINQ 101: Critical Inquiry	3	X				
BIOL 105 Pathways in Biology	3	X				
<b>Term Credit Total:</b>	15	15				
Year and Term: Year 2 Fall Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
CHEM 161: General Chem II	3	X			Pre: CHEM 160,160A; Co: CHEM 161A, CHEM 161R	
CHEM 161A: General Chem II Lab	1	X			Pre: CHEM 160,160A; Co: CHEM 161, CHEM 161R	
BIOL 161: General Bio II	3	X			Pre: BIOL 160,160A; Co: BIOL161A	
BIOL 161A: General Bio II Lab	1	X			Pre: BIOL 160,160A; Co: BIOL161	
Gen Ed	3	X				
COMM 110: Oral Communication	3	X				
<b>Term Credit Total:</b>	14	14				
Year and Term: Year 3 Fall Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
BIOL 244: Ecology	4		X		Pre: BIOL 100/100A; BIOL 161/161A	
JRSM 301: Junior Seminar	3	X				
Gen Ed	3	X				
PHYS 160: Physics for Life Sci	4		X		Pre: Math 201	
Open Elective (eg. Med Termniology)	2			X		
<b>Term credit total:</b>	16	6	8	2		
Year and Term: Year 4 Fall Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
Major Elect 1 (BIOL 366 or BIOL 370)	3		X			
BIOL 355: Molecular Biology	4		X		BIOL 360, CHEM 161A, BIOL 161/A	
EDUC 502: Foundations in Education for Students with Disabilities	3			X		
EDUC 505: Teaching Engl as a 2nd Language	3			X		
Gen Ed	3	X				
<b>Term Credit Total:</b>	16	3	7	6	7	

Year and Term: Year 1 Spring Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
CHEM 160: General Chemistry I	3	X			Pre: MATH 116; Co: CHEM 160A, CHEM 160R	
CHEM 160A: General Chemistry I Lab	1	X			Pre: MATH 116; Co: CHEM 160, CHEM 160R	
CHEM 160R: General Chem I Recitation	0	X			Co: CHEM 160, CHEM 160A	
BIOL 160: General Bio I	3	X			Pre: Math 116; Co: BIOL 160A, BIOL 160R	
BIOL 160A: General Bio I Lab	1		X		Pre: Math 116; Co: BIOL 160, BIOL 160R	
MATH 201	3	X				
ENGL 112 Written English II	3	X				
<b>Term Credit Total:</b>	14	13	1			
Year and Term: Year 2 Spring Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
BIOL 275: Cell Biology	4		X		Pre: ENGL 111, BIOL 161/161A, CHEM 161/161A	
BIOL 226: Elements of Biochemistry	3		X		Pre BIOL 161/161A, CHEM 161/161A	
BIOL 223: Intro to Sci Teaching	3		X		Pre: BIOL 105; BIOL 161/161A	
Gen Ed	6	X				
<b>Term Credit Total:</b>	16	6	10			
Year and Term: Year 3 Spring Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
BIOL 360: Genetics	4		X		Pre: BIOL 275 or BIOL 203/A; BIOL 161/A, CHEM 161/A	
Gen Ed	3	X				
EDUC 500: Educational Perspectives from Diverse Cultures	3			X		
CHEM 260: Organic Chem I	3		X		Pre: CHEM 100; CHEM 100A; CHEM 101; CHEM 101A	
CHEM 260A: Organic Chem I Lab	1		X		Pre: CHEM 100; CHEM 100A; CHEM 101; CHEM 101A	
<b>Term Credit Total:</b>	14	3	8	3		
Year and Term: Year 4 Spring Term		Credits Per Classification				
Course Number & Title	CR	GE	Maj	OE	Co / Prerequisite(s)	
BIOL 455: Capstone in Bio Ed	3		X		Pre: BIOL 223, BIOL 161/A	
EDUC 507: Approaches to Literacy Inst.in Early Childhood through Adolescence	3			X		
EDUC 517: Educational Psychology and Adolescent Development	3			X		
Open Elective	3			X		
Major Elective 2	3		X			
<b>Term Credit Total:</b>	15		6	9		

Credits: 120	General Education: 60	Major credits: 40	Open Elective: 20
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Legend: CR: Credits GE: General Education Maj: Major / Major Elective OE: Open Elective SM: Success Marker Co/Prerequisite(s): List of co/ prerequisites for noted course