

NATURAL SCIENCES
Biology Option, B.A. (120 Units)

Valid for Catalog Years: 2018/2019 to 2019/2020

*Official planning guide approved by the College of Science & Math

For assistance or to schedule an advising appointment, please contact the **CSM Advising and Resources Center** at 559-278-4150, Science I 136

Department of Science & Mathematics Interdisciplinary Courses and Programs: 559-278-

	Freshman		Sophomore		Junior		Senior	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Units	15	15-16	14-15	16-17	16	15	14-20	15-17
Milestones								
General Education	A2 (3 Units) Written Communication *Must pass with a C or better; ENGL 10 recommended	A1 (3 Units) Oral Communication *Must pass with a C or better	C2 (3-4 Units) Humanities	D1 (3 Units) American History	D3 (3 Units) Social Science		IC (3-4 Units) Arts & Humanities	ID (3-4 Units) Social, Political, & Economic Institutions
	A3 (3 Units) Critical Thinking *Must pass with a C or better	C1 (3-4 Units) Arts		D2 (3 Units) American Government	E1 (3 Units) Lifelong Understanding & Self Development			
				C1/C2 (3-4 Units) Arts or Humanities				
Major	GE Area B1 CHEM 1A (3 Units) Physical Sciences [Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1AL] *Not open to students with credit in CHEM 1B	GE Area B2 BIOL 1A (4 Units) Life Sciences	CHEM 8 (3 Units) [Pre-Req: CHEM 1B or 3A] OR CHEM 128A (3 Units) [Pre-Req: CHEM 1B or 8 (C or better) or instructor permission]	BIOL 101 (4 Units) [Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended]	BIOL 102 (3 Units) [Pre-Req: BIOL 1A, 1B]	BIOL 103 (3 Units) [Pre-Req: BIOL 102; CHEM 150 or 155A]	BIOL 122, 124, 125, 130, 131, 132, 133, 135, 136, 171, or 172S (3-4 Units) *See course catalog for prerequisite requirements	BIOL 105 (3 Units) [Pre-Req: BIOL 101, 102, 103; Senior standing or instructor permission]

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	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Units	15	15-16	14-15	16-17	16	15	14-20	15-17
Major	GE Area B3 CHEM 1AL (2 Units) Lab [Pre-Req: CHEM 1A (may be taken concurrently)]	CHEM 1B (3 Units) [Pre-Req: CHEM 1A & 1AL (both passed with a C or better); CHEM 1BL (may be taken concurrently)]	BIOL 1B (3 Units) [Pre-Req: BIOL 1A; first-time enrollees must take BIOL 1BL concurrently]		PHYS 2A (4 Units) [Pre-Req: DS 71, MATH 75, MATH 70, or department permission]	BIOL 104 (1 Unit) [Pre-Req: BIOL 102; BIOL 103 (may be taken concurrently)]	EES 1 (4 Units) [Pre-Req: MATH 4R or second-year high school algebra recommended]	BIOL 160, 161, 162 and 162L, 163 (3-4 Units) *See course catalog for prerequisite requirements
	GE Area B4 MATH 75 (4 Units) Quantitative Reasoning *See course catalog for prerequisite requirements	CHEM 1BL (2 Units) [Pre-Req: CHEM 1B (may be taken concurrently)]	BIOL 1BL (1 Unit) [Pre-Req: First-time enrollees must take BIOL 1B concurrently]			PHYS 2B (4 Units) [Pre-Req: PHYS 2A]	PSCI 21 (4 Units) [Pre-Req: Second-year high school algebra recommended]	NSCI 106 (3 Units)
			MATH 101 (4 Units) [Pre-Req: MATH 70, 75, or 75A & B] *No credit if taken after MATH 108 OR PSYCH 42 (4 Units)			BIOL 120 (4 Units) [Pre-Req: BIOL 1A & 1B; CHEM 8 or 128A; or BIOL 11 & CHEM 150]		
						GE Area IB EES 168 (3 Units) Physical Universe & Its Life Forms [Pre-Req: GE Foundation & Breadth Area B]		

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Units	15	15-16	14-15	16-17	16	15	14-20	15-17
Additional Graduation Requirements				Elective *CHEM 128B recommended	CHEM 150 (3 Units) [Pre-Req: CHEM 3B, 8, or CHEM 128A & 128B] OR CHEM 155A (3 Units) [Pre-Req: CHEM 128B]		UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)	MI (3 Units) Multicultural/International

FOOTNOTES:

Prerequisites/Corequisites: Other restrictions may apply. Please see your course catalog for detailed prerequisite/corequisite requirements.

Electives (4-6 units): Units in this area may be used toward a double major or minor. Students must earn a minimum of 120 units total to graduate. The number of required elective units may vary, depending on the amount of units earned from major and GE courses.

Upper Division Writing Skills requirement (UDWS): All undergraduate students must demonstrate competency in writing skills by passing the Upper Division Writing Exam (UDWE) or by obtaining a C or better in an approved **upper division writing course, identified by the letter "W."**

Substitutions: If substitutions/exceptions/waivers are made for any major courses that also meet GE and/or the Multicultural/International graduation requirement, the student is responsible for completing additional courses to satisfy the respective areas (GE and/or MI). This also includes the upperdivision writing requirement.

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Department of Science & Mathematics Interdisciplinary Courses and Programs: 559-278-5173, Science I 100

Units	Freshman		Sophomore		Junior		Senior	
	Fall 15	Spring 15-16	Fall 14-15	Spring 16-17	Fall 16	Spring 15	Fall 14-20	Spring 15-17
General Education	A2 (3 Units) Written Communication *Must pass with a C or better; ENGL 10 recommended	A1 (3 Units) Oral Communication *Must pass with a C or better	C2 (3-4 Units) Humanities	D1 (3 Units) American History	D3 (3 Units) Social Science		IC (3-4 Units) Arts & Humanities	ID (3-4 Units) Social, Political, & Economic Institutions
	A3 (3 Units) Critical Thinking *Must pass with a C or better	C1 (3-4 Units) Arts		D2 (3 Units) American Government	E1 (3 Units) Lifelong Understanding & Self Development			MI (3 Units) Multicultural/International
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Major	GE Area B1 CHEM 1A (3 Units) Physical Sciences [Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1AL] *Not open to students with credit in CHEM 1B	GE Area B2 BIOL 1A (4 Units) Life Sciences	CHEM 8 (3 Units) [Pre-Req: CHEM 1B or 3A] OR CHEM 128A (3 Units) [Pre-Req: CHEM 1B or 8 (C or better) or instructor permission]	BIOL 101 (4 Units) [Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended]	BIOL 102 (3 Units) [Pre-Req: BIOL 1A, 1B]	BIOL 103 (3 Units) [Pre-Req: BIOL 102; CHEM 150 or 155A]	BIOL 122, 124, 125, 130, 131, 132, 133, 135, 136, 171, or 172S (3-4 Units) *See course catalog for prerequisite requirements	BIOL 105 (3 Units) [Pre-Req: BIOL 101, 102, 103; Senior standing or instructor permission]
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Electives				Elective *CHEM 128B recommended	CHEM 150 (3 Units) [Pre-Req: CHEM 3B, 8, or CHEM 128A & 128B] OR CHEM 155A (3 Units) [Pre-Req: CHEM 128B]		UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)	

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