

NATURAL SCIENCES
Chemistry 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

the
CSM Advising and Resources Center
at 559-278-4150, Science I 136
Department of Science & Mathematics Interdisciplinary Courses and Programs:

	Freshman		Sophomore		Junior		Senior	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Units	15	16	14-16	15	14-19	16-17	17-18	13-14
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	C1 (3-4 Units) Arts	D1 (3 Units) American History	D3 (3 Units) Social Science	C1/C2 (3-4 Units) Arts or Humanities	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		C2 (3-4 Units) Humanities	D2 (3 Units) American Government		E1 (3 Units) Lifelong Understanding & Self Development		
Major	GE Area B1 CHEM 1A (3 Units) Physical Sciences [Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1A.] *Not open to students with credit in CHEM 1B	GE Area B2 BIOL 1A (4 Units) Life Sciences	BIOL 1B (3 Units) [Pre-Req: BIOL 1A; first-time enrollees must take BIOL 1BL concurrently]	CHEM 128A (3 Units) [Pre-Req: CHEM 1B or 8 (C or better) or instructor permission]	GE Area IB EES 168 (3 Units) Physical Universe & Its Life Forms [Pre-Req: GE Foundation & Breadth Area B]	CHEM 128B (3 Units) [Pre-Req: CHEM 128A (C or better)]	CHEM 108 (4 Units) [Pre-Req: MATH 76; CHEM 8 or 128A; PHYS 2A, 2B or 4A, 4AL, 4B, 4BL, 4C; MATH 77 recommended]	BIOL 101 (4 Units) [Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended]

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Units	15	16	14-16	15	14-19	16-17	17-18	13-14
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 1BL (1 Unit) [Pre-Req: First-time enrollees must take BIOL 1B concurrently]	CHEM 129A (2 Units) [Pre-Req: CHEM 8 or 128A (C or better; may be taken concurrently)]	CHEM 102 (5 Units) [Pre-Req: CHEM 1B (C or better); CHEM 128A] or CHEM 105 (4 Units) [Pre-Req: CHEM 1A (C or better), CHEM 3A (B or better), or instructor permission]	PHYS 2B (4 Units) [Pre-Req: PHYS 2A]	CHEM 150 (3 Units) [Pre-Req: CHEM 3B, 8, or CHEM 128A & 128B] or CHEM 155A (3 Units) [Pre-Req: CHEM 128B]	NSCI 106 (3 Units)
	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)]		EES 1 (4 Units) [Pre-Req: MATH 4R or second-year high school algebra recommended]	PHYS 2A (4 Units) [Pre-Req: DS 71, MATH 75, MATH 70, or department permission]		PSCI 21 (4 Units) [Pre-Req: Second-year high school algebra recommended]	
			MATH 76 (4 Units) [Pre-Req: MATH 75 or MATH 75A & B]					

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Additional Graduation Requirements			MATH 101 (4 Units) [Pre-Req: MATH 70, 75, or 75A & B] *No credit if taken after MATH 108 or PSYCH 42 (4 Units)		UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)	Elective	Elective	MI (3 Units) Multicultural/International

FOOTNOTES:

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

Electives (9-10 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

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	A3 (3 Units) Critical Thinking *Must pass with a C or better		C2 (3-4 Units) Humanities	D2 (3 Units) American Government		E1 (3 Units) Lifelong Understanding & Self Development		MI (3 Units) Multicultural/International
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	BIOL 1B (3 Units) [Pre-Req: BIOL 1A; first-time enrollees must take BIOL 1BL concurrently]	CHEM 128A (3 Units) [Pre-Req: CHEM 1B or 8 (C or better) or instructor permission]	GE Area IB EES 168 (3 Units) Physical Universe & Its Life Forms [Pre-Req: GE Foundation & Breadth Area B]	CHEM 128B (3 Units) [Pre-Req: CHEM 128A (C or better)]	CHEM 108 (4 Units) [Pre-Req: MATH 76; CHEM 8 or 128A; PHYS 2A, 2B or 4A, 4AL, 4B, 4BL, 4C; MATH 77 recommended]]	BIOL 101 (4 Units) [Pre-Req: BIOL 1A, 1B; PSYCH 42 or MATH 101; MATH 70 or equivalent recommended]
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		MATH 76 (4 Units) [Pre-Req: MATH 75 or MATH 75A & B]						
Electives			MATH 101 (4 Units) [Pre-Req: MATH 70, 75, or 75A & B] *No credit if taken after MATH 108 or PSYCH 42 (4 Units)		UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)	Elective	Elective	

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