

## Bachelor of Science in Cell and Molecular Biology (CMOL)

2024-25 Catalog

In order to earn the Bachelor of Science in Cell and Molecular Biology degree, students must complete a minimum of 180 quarter credits with a cumulative and major/program grade point average of 2.0, including:

			prereqs	credits	quarter?
<b>I. Core Curriculum Requirements:</b>	UCOR 1100	Academic writing seminar	–	5	
	UCOR 1300	Creative expression and interpretation	–	5	
	UCOR 1400	Inquiry seminar in humanities	–	5	
	UCOR 1600	Inquiry seminar in social sciences	–	5	
	UCOR 2100	Theological explorations	UCOR 1100	5	
	UCOR 2500	Philosophy of the human person	UCOR 1100	5	
	UCOR 2900	Ethical reasoning	UCOR 2500	5	
	UCOR 3100	Religion in a global context	UCOR 2100	5	
	UCOR 3400	Humanities and global challenges	75 credits + UCOR 1400	5	
UCOR 3600	Social Science and global challenges	75 credits + UCOR 1600	5		

Note: UCOR 1200 and UCOR 1800 are not listed above; they are fulfilled by other Biology major requirements.

<b>II. Major Curriculum Requirements:*</b>	BIOL 1400	Biology First Year Experience	1	F	
	BIOL 1610+1611	Cell and Molecular Biology + Lab	4+1	WS	
	BIOL 1620+1621	Evolution and Ecology + Lab	4+1	FW	
	BIOL 1630+1631	Physiology and Development + Lab	4+1	SF	
	BIOL 2700	Genetics	5	FWS	
	BIOL 2730	Bioinformatics	5	W	
	BIOL 2750+2751 §	Biotechnology + Lab	4+2	S	
	BIOL 3750/3760/3770	(Mol Bio or Protein or Genomics) Project Lab	5		
	BIOL 4100/4150/4700	Med Micro or Immunology or Mol Genetics	5		
	BIOL 4750+4751	Cell Biology + Lab	4+2	FWS	
	CHEM 3600	Introductory Biochemistry	5	FWS	
	BIOL Electives	(BIOL ≥2210 and above)	5		
<b>Senior Synthesis:</b> (6 req'd credits; 2 per Q)	BIOL 4991	Senior Synthesis I	2	F	
	BIOL 4992	Senior Synthesis II	2	W	
	BIOL 4993	Senior Synthesis III	1	S	
	BIOL 4996	Biology Senior Synthesis Seminar	1	S	

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**Biology/Biochemistry requirements:**

**64**

\* In prerequisite courses, grades of at least C are required in biology courses and at least a C- are required in other sciences.

§ Prerequisites for enrollment in BIOL2750+2751 are: BIOL 1610+1611, 1620+1621, 1630+1631; CHEM 1520; BIOL2700 with a C+ or better; and a minimum biology major GPA of 2.8; or permission of instructor.

<b>III. Other Major Requirements:*</b>	CHEM 1500+1501	General Chemistry I + Lab I	4+1	FW	
	CHEM 1510+1511	General Chemistry II + Lab II	4+2	WS	
	CHEM 1520 or 1590	General Chemistry III or Research-Focused GC III	4-5	SF//S	
	CHEM 2500+2501	Organic Chem I: Structure and Reactivity + Lab	4+2	FW	
	CHEM 2510+2511	Organic Chem II: Functional Group Interconv + Lab	4+2	WS	

<b>Math/ Stats</b> (pick a or b)	<b>a:</b>	MATH 1334	Calculus I	5	FWS	
		MATH 1335	Calculus II	5	FWS	
	<b>b:</b>	MATH 1210	Statistics for Life Sciences	5	FWS	
		MATH 1230	Calculus for Life Sciences	5	FS	

<b>Physics</b> (pick a or b)	<b>a:</b>	PHYS 1050+1051	Mechanics	4+1	F	
		PHYS 1060+1061	Waves, Sound, Electricity, and Magnetism	4+1	W	
		PHYS 1070+1071	Thermodynamics, Optics, and Modern Physics	4+1	S	
	<b>b:</b>	PHYS 1210+1211	Mechanics	4+1	WS	
		PHYS 1220+1221	Electricity and Magnetism	4+1	SF	
		PHYS 1230+1231	Waves and Optics	4+1	FW	

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**Other science requirements:**

**52**

\*\*\* Total Major Curriculum Requirement credits required for graduation:

**116**