

Marymount California University
BIOLOGY BS Required Courses Checklist

Effective Fall 2020

REQUIRED BIOLOGY BS CORE COURSES	Core	Prerequisite	Offered	✓
SCI 240 – General Biology I (4 units)	PS3	SCI 115 or 220	Every F	
SCI 241 – General Biology II (4)	PS3	SCI 240	Every SP	
SCI 242 – General Biology III (4)	PS3	SCI 241	Every F	
SCI 220 – General Chemistry I (5)	PS3		Every F	
SCI 221 – General Chemistry II (5)	PS3	SCI 220	Every SP	
SCI 200 – General Physics I (4) <u>and</u> SCI 201 – General Physics II (4) OR SCI 230 – Physics with Calculus I (5) <u>and</u> SCI 231 – Physics with Calculus II (5)	PS3	1 from: MTH 105, 111, 130, 131 SCI 200 MTH 120 or 130 SCI 230	F 20, 22, 23 SP 21, 23, 24 F 21, 24 SP 22, 25	
MTH 130 - Calculus I (4)	A2	MTH 111	Every F & SP	
SCI 315 – Organic Chemistry I (5)	A3, PS3	SCI 221	Every F	
SCI 316 – Organic Chemistry II (5)	A3, R2, R3, PS3	SCI 315	Every SP	
SCI 320 – Biochemistry (4)	PS3	SCI 316	Every F	
SCI 321 – Biochemistry Lab (2)	PS3	SCI 320	Every SP	
SCI 341 – Techniques in Biology Laboratory (2)	PS3, R2	SCI 241	Every F	
SCI 342 – Science Career Seminar (4)	A3, R1	SCI 233 or 241 or 315	Every SP	
SCI 350 – Genomics (4)	PS3	SCI 241	Every F	
SCI 380 – Molecular Biology (5)	R2, R3, PS3	SCI 241 & SCI 316	Every SP	
SCI 443 – Biology Seminar (4)	C1, A3	SCI 342, Sr. Standing	Every F	

BIOLOGY BS ELECTIVES (12 units minimum)	Core	Prerequisite	Offered	✓
At least 8 units must be upper division (300-400 #)				
SCI 130 – Biology of Animals (4 units)	PS3		F 23	
SCI 132 – Human Anatomy (4)	PS3		Every F	
SCI 133 – Human Physiology (4)	PS3		Every SP	
SCI 135 – Anatomy and Physiology (4)	PS3			
SCI 136 – Medical Terminology (1)		Rec: a Life Science	Every F	
SCI 140 – Plants and Civilization (4)	PS3		F 21, 23	
SCI 150 – Microbiology (4) Not a degree option if SCI 330 taken	PS3		F 21, 23	
SCI 160 – Marine Biology (4)	PS3		F 20, 22, 24	
SCI 170 – Ecology of Humans (4)	PS3		SP 22, 24	
SCI 233 – Science of Human Performance (4)	PS3	SCI 130, 132, 133, 135, 140, 145, 150, 155, 160, 170, 240, 241, 242, or 246	Every F	
SCI 246 – Nutrition (4)	PS3		Every SP	
SCI 330 – Biology of Microorganisms (4)	R3, PS3	SCI 241	SP 21, 23, 25	
SCI 333 – Exercise Physiology (4)	PS3	SCI 233 or 241	Every SP	
SCI 334 – Ergogenic Aids in Sports (4)	PS3		Every SP	
SCI 340 – Cell Biology (4)	PS3	SCI 241 & SCI 315	F 21, 23	
SCI 395/495 – Independent Study (1-4)			Every F & SP	
SCI 440 – Immunology (4)	PS3	SCI 241	F 20, 22, 24	
SCI 442 – Developmental Biology (4)	PS3	SCI 241	SP 22, 24	

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MCU BS CORE COMPETENCY REQUIREMENTS OUTSIDE OF THE MAJOR	Core Completed	
Written Communication 1 - ENG 112/112H	C1	
Oral Communication- CAR 105 or 145, BUS 230	C2	
Information Literacy – ID 230 (1)	A1	
Catholic History and Thought – 1 course from: PHI 325; REL 102, 103, 112, 120, 130/130H, 230, 310	PS1	
Global or Cross-Cultural/Diversity - 1 course from: AM 201, 211, 304, 305; BUS 535; CAR 301, 332, 401; CJ 362; ECO 135, 400, 410; GS 241, 405; HIS 100, 101, 330; ID 302H; POL 240; PSY 280, 340; REL 130/130H; SOC 100, 250; SPA 200; THE 310	PS2	
Creative Thinking - 1 course from: AM (AM exclusions: 107, 207, 307, 407, 450, Internship, and Practicum courses), MUS ; THE ; BUS 315, 316, 415, 454; ENG 120, 125, 140, 310; ID 111, 200H, 430H	PS4	
Ethical Reasoning – 1 course from: ACCT 385; BUS 240; CJ 331; ID 200H, 430H; PHI 100, 110, 150, 215, 315; PSY 240	PS5	

UNIT TOTALS		
MINIMUM UNITS TO EARN A BS = 120 Any college level course listed in the Catalog or accepted as transfer credit may be taken as an elective to fulfill the 120-degree requirement in this degree program.	Completed units	
	Add in-progress units	
	Add planned/remaining units	
	TOTAL UNITS	

BS in Biology Program Learning Outcomes:

1. **Communication:** Communicate effectively the concepts, methods, results and conclusions of biological research, in oral and written form for an intended audience.
2. **Analysis:** Formulate and test hypotheses through collection, analysis, and use of experimental and scientific data in the field of biological sciences.
3. **Problem solving:** Demonstrate steps necessary to solve complex problems in the life sciences disciplines of biochemistry, molecular biology, cell biology, genetics and other biological disciplines.
4. **Info Lit:** Access, select, and critically review scientific knowledge supporting scientific research.
5. **Organisms & Processes:** Express knowledge of living organisms and related processes such as cellular respiration, cell division, metabolism and photosynthesis.
6. **Scientific Development:** Explore and utilize the relevant technical laboratory skills and technology for a career in life science research.