

Marymount California University  
BIOLOGY BA Required Courses Checklist

Effective Fall 2020

REQUIRED BIOLOGY BA COURSES (65-67 UNITS)	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) <b>OR</b> SCI 230 – Physics with Calculus I (5) <u>and</u> SCI 231 – Physics with Calculus II (5)	PS3 PS3 PS3 PS3	1 from: MTH 105, 111, 130, 131 SCI 200 MTH 120 or 130 SCI 230	F 22, 24 SP 21, 23, 24 F 21, 24 SP 22, 25	
MTH 120 - Calculus for Man. Life & Social Sci (4) <b>OR</b> MTH 130 - Calculus I (4) 1 Calculus course is <b>required</b>	A2	MTH 105 or 111 or 115 MTH 111	Every F & SP 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 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 BA ELECTIVES (8 units minimum)	Core	Prerequisite	Offered*	✓
<b>At least 4 units must be upper division (300-400 level)</b>				
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: any Life Sci. course	Every F	
SCI 140 – Plants and Civilization (4)	PS3		F 21, 23	
SCI 150 – Microbiology (4) Not eligible 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 321 – Biochemistry Lab (2)		SCI 320	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, 25	
SCI 341 – Techniques in Biology Laboratory (2)	R2, PS3	SCI 241	Every F	
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	

\*F = Fall SP = Spring

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

UNIT TOTALS		
<b>MINIMUM UNITS TO EARN A BA = 120</b> 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.	<b>Completed units</b>	
	<b>Add in-progress units</b>	
	<b>Add planned/remaining units</b>	
	<b>TOTAL UNITS</b>	

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 life science research.
5. Organisms & Processes: Express knowledge of living organisms and related processes such as cellular respiration, cell division, metabolism and photosynthesis.
6. Career Exploration: Identify and develop career goals using leadership, volunteer, internship, online or classroom experiences.