## **Biochemistry & Molecular Biology Major**

Bachelor of Science As of fall 2021

Major Requirements: 70 semester hours. **At least 36 semester hours must be taken at Aquinas**. All majors must attend at least 8 seminars sponsored by the Natural Science and/or Math Departments. BMB majors may not declare additional majors/minors in Biology or Chemistry. A GPA of 2.0 must be maintained with no more than one C-. A minimum of a C is required in BY 170 & BY 171.

## AQUINAS REQUIREMENTS

BY 170 Introduction to Organisms 4.0   BY 171 Introduction to Cells 4.0   BY 326 Cell Biology 4.0   BY 328 Genetics (WI) 5.0   CS 152 Spreadsheets (prerequisite for CY 112) 1.0   CY 111 General Chemistry I 4.0   CY 112 General Chemistry II 4.0   CY 211 Organic Chemistry II 4.0   CY 212 Organic Chemistry II 4.0   CY 215 Quantitative Analysis 4.0   CY 314 Physical Chemistry for the Life Sciences 3.0
BY 326 Cell Biology4.0BY 328 Genetics (WI)5.0CS 152 Spreadsheets (prerequisite for CY 112)1.0CY 111 General Chemistry I4.0CY 112 General Chemistry II4.0CY 211 Organic Chemistry II4.0CY 212 Organic Chemistry II4.0CY 215 Quantitative Analysis4.0
BY 328 Genetics (WI) 5.0   CS 152 Spreadsheets (prerequisite for CY 112) 1.0   CY 111 General Chemistry I 4.0   CY 112 General Chemistry II 4.0   CY 211 Organic Chemistry I 4.0   CY 212 Organic Chemistry II 4.0   CY 215 Quantitative Analysis 4.0
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CY 212 Organic Chemistry II4.0CY 215 Quantitative Analysis4.0
CY 215 Quantitative Analysis 4.0
CY 325 Biochemistry 4.0
CY 400 Undergrad Seminar / Research (SC) 1.0
CY 401 Undergrad Seminar / Research (SC) 2.0
BMB 305 Advanced Biochemistry and Molecular Bic 3.0
BMB 315 Molecular Techniques 3.0
PC 213 Mechanics, Sound, and Heat 4.0
PC 214 Electricity, Magnetism and Light 4.0
MS 121 Calculus I 4.0
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## TRANSFER EQUIVALENTS

BIOL128	ORGANISMAL BIOLOGY
BIOL127	CELL BIOLOGY
BIOL270	HUMAN GENETICS & BIOL275 MOLECULA
CITA126	MICROSOFT EXCEL
CHEM15	1 GENERAL CHEMISTRY LECTURE I &
CHEM16	1 GENERAL CHEMISTRY LAB I
CHEM15	2 GENERAL CHEMISTRY LECTURE II &
CHEM16	2 GENERAL CHEMISTRY LAB II
CHEM25	1 ORGANIC CHEMISTRY LECTURE I &
CHEM27	2 ORGANIC CHEMISTRY LABORATORY
CHEM25	2 ORGANIC CHEMISTRY LECTURE II
CHEM26	2 QUANTITATIVE ANALYSIS
PHYS252	1 PHYSICS I WITH CALCULUS
MATH15	1 CALCULUS I or MATH161 HONORS CAL

Elective Courses: At least 4 semester hours chosen from these courses are required.

BY 350 Evolution	4.0		
BY 361 Immunology	4.0		
BY 372 Physiology	4.0		
CY 346 Instrumental Methods of Analysis	4.0		
Recommended Courses:   MS 122 Calculus II   MS 231 Multivariate Calculus   MS 252 Statistics	4.0 4.0 3.0	MATH152 CALCULUS II MATH253 CALCULUS III	

Please Note: Aquinas College reserves the right to change, modify or amend the above-stated requirements and/or courses in its sole discretion and without prior notice.

**BIOLOGY I** 

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