

BIOCHEMISTRY

Students majoring in Biochemistry take a selection of chemistry and biology courses that apply the fundamentals of chemistry to living systems. Biochemistry is a great choice if you are planning a career in the biochemical or pharmaceutical industry, or planning to pursue graduate studies in health care.



SCAN TO FIND:

- Featured courses.
- Program requirements and more!

BEYOND THE CLASSROOM

HANDS-ON EXPERIENCE

Under the guidance of faculty, Biochemistry students participate in chemistry research. Many research students are co-authors on published

chemistry research papers while others present their work at regional professional meetings. Cooperative education provides real-world experience in industrial settings or research labs in Greater Cincinnati and have often led to full-time positions.



FURTHER YOUR EDUCATION

Students graduating with a Biochemistry degree may choose to pursue graduate degrees in biochemistry or in health care fields such as medicine, pharmacy, physical

enter the workforce as a researcher in a biomedical lab. Students interested in preparing for a career in health care at the graduate level are encouraged to contact the Health Professions Advising Committee (hpac@msj.edu).

therapy, or physician assistant studies. Students may also **CAREERS IN BIOCHEMISTRY**

FORENSIC DOCTOR LAB TECHNICIAN **SCIENTIST PHYSICIAN** RESEARCH **PHARMACIST ASSISTANT SCIENTIST**

AFFORDABLE EDUCATION

PRESIDENT'S SCHOLARSHIP **FULL TUITION & FEES**

> DEAN'S SCHOLARSHIP up to \$24,000/year

MERIT SCHOLARSHIPS up to \$22,000/year

President's and Dean's scholarships are competitively awarded to high school seniors (class of 2023). To be ligible for consideration, you must apply by December 2022. Merit scholarships are awarded based on high school

ALUMNI SUCCESS

>100% CAREER OUTCOMES RATE

100% of 2021 School of Behavioral & Natural Sciences graduates were successfully employed, enrolled in graduate studies, or volunteering within six months of graduation. The knowledge rate for this survey was 85%.



MOUNT ST. JOSEPH UNIVERSITY®

SCHOOL OF BEHAVIORAL & NATURAL SCIENCES

Office of Admission 513-244-4531 | 800-654-9314 www.msj.edu | admission@msj.edu

Eric Johnson, Ph.D.

Chair, Department of Chemistry Associate Professor of Chemistry eric.johnson@msj.edu

BIOCHEMISTRY MAJOR - BACHELOR OF SCIENCE

FIRST YEAR-SEMESTER #1		FIRST YEAR- SEMESTER #2		UNIVERSITY CORE	
BIO 111 Principles of Biology I 4		CHE 112 General Chemistry II 3		COMMON GOOD	
BIO 111A Prin. of Biology I Lab	0	CHE 112A Gen. Chem II Lab	1	CORE 115 Common Ground	Code COR
CHE 111 General Chemistry I	3	MTH 194 Calculus II	4	Justice & the Common Good	Code JCG
CHE 111A Gen. Chem. I Lab	1	COM 100/ ENG 101	3	Ethics	Code CE
MTH 193 Calculus I	4	SOC 103	3	Experiential Learning	Code EXP
CORE 115	3	Core requirement	3	Core Capstone	Code CCP
				HUMANITIES	
SECOND YEAR-SEMESTER #1		SECOND YEAR-SEMESTE	<u>R #2</u>	Speech (COM 100)	Code C
CHE 211 Organic Chemistry I	3	CHE 212 Organic Chemistry II	3	Writing (ENG 101)	Code C
CHE 211A Org. Chem I Lab	1	CHE 212A Org. Chem II Lab	1	Literature (ENG)	Code CL
PHY 201 General Physics I	3	CHE 200 Chem. Soph. Seminar	1	Art or Music	Code CAM
PHY 201A Gen. Physics I Lab	1	PHY 202 General Physics II	3	History	Code CH
CED 220 Foundations of		PHY 202A Gen. Physics II Lab	1	Religious Studies	Code CR
Professionalism	1	Core requirement	3	Philosophy	Code CP
COM 100/ENG 101	3	Core requirement	3	SCIENCES	
Core requirement	3			Biology/Chemistry/Physics + Lab Code CN	
_				Mathematics	Code CMA
THIRD YEAR-SEMESTER:	<u>#1</u>	THIRD YEAR-SEMESTER	<u>x #2</u>	SOC 103 Our Social World	Code CS
CHE 350 Physical Chemistry I	3	CHE 326 Biochemistry II	3		
CHE 350A Phys. Chem I Lab	1	CHE 326A Biochem. II Lab	1	Choose one discipli	ne:
CHE 325 Biochemistry I	3	CHE 355 [#] or elective	3	ECO 212 Microeconomics	Code CEP
CHE 325A Biochem. I Lab	1	CHE 355A#	1	PSY 103 Psychology	Code CEP
Core requirement	3	CHE 300 Chem. Junior Seminar	1		
Core requirement	3	BIO 305/320/310/310A	4	<u>NOTES</u>	
Core requirement	3	Core requirement	3	Prerequisites:	
-		-			r high cahaal
FOURTH YEAR-SEMESTER	#1	FOURTH YEAR-SEMESTER #2		Chemistry- College preparatory high school	
CHE 314 Inter. Analytical Chem 3		CHE 315 [#] or elective 3		chemistry or the successful completion of a placement test.	
CHE 314A Inter. Analytical		CHE 315A#	1		ronorotory
Chem Lab	1	CHE 400 Chem. Seminar &		Math- Three years of college preparatory high school mathematics including	
Core requirement	3	Capstone	1	functions.	umg
Core Capstone	3	BIO 305/320/310/310A	4	Tunctions.	
Elective	3	Electives to reach 120 credits		120 credits hours minimum ne	adad to
				graduate.	eded to
				graduate.	
		#Students take CHE 315/315A		*Students must have an appror	vriate math
		Instrumental Analysis with lab or		*Students must have an appropriate math placement before enrolling in MTH 193 and	
		CHE 355/355A Physical Chem. II with		CHE 111.	
		lab		CILL III.	
				**Curriculum Guide does not replace advising by a faculty member within the	
		Students choose two from BIO 305			
		Microbiology; BIO 320 Genetics; BIO		Chemistry program.**	
		310/310A Cell Biology with lab		Chemistry program.	
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Mount St. Joseph University ("the University") is committed to providing an educational and employment environment free from discrimination or harassment on the basis of race, color, national origin, religion, sex, age, disability, sexual orientation, gender identity, or other minority or protected status. This commitment extends to the University's administration of its admission, financial aid, employment, and academic policies, as well as the University's athletic programs and other University-administered programs, services, and activities.

The University at afficial programs and other University administered programs, services, and activities.

The University has designated the Title IX Coordinator, (513) 244-4467, as the individual responsible for responding to inquiries, addressing complaints, and coordinating compliance with its responsibilities under Title IX of the Education Amendments of 1972 and other related federal and state civil rights laws. The University has designated the Director of Human Resources/Equal Opportunity Officer, (513) 244-4979, as the individual responsible for responding to inquiries, issues, or complaints relating to discriminatory, harassing, or retaliatory conduct related to race, color, national origin, religion, age, disability, or any other legally protects status. The University has designated the Associate Provost for Academic Affairs, (513) 244-4614, as the individual responsible for responding for addressing formal complaints regarding compliance with its responsibilities under Section 504 of the Rehabilitation Act of 1973. 09-WO-001842/21/600