



# BIOMEDICAL SCIENCES

The Biomedical Sciences major provides you with key science courses to prepare you for a career in health care with the flexibility to design a curriculum that fits your particular interests. Concentrations include: pre-veterinary, pre-medical, pre-podiatry, pre-dentistry, pre-optometry, pre-pharmacy, pre-chiropractic, pre-physician assistant, pre-physical therapy, and pre-occupational therapy. All concentrations are designed to meet requirements for professional schools in the tri-state area.



### SCAN TO FIND:

- Featured courses.
- Program requirements and more!

## BEYOND THE CLASSROOM

### HANDS-ON EXPERIENCE

Biomedical Sciences majors may engage in individualized research on campus with a faculty mentor, have opportunities for shadowing and observation, and engage in co-op positions or internship experiences in off-campus research programs. These opportunities strengthen applications to professional schools and provide valuable experiences that serve to enhance career options in the future.



### FURTHER YOUR EDUCATION

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](mailto:hpac@msj.edu)). On-site pre-health advisors assist students in career path exploration, and developing the skills necessary to be successful in their application process, including resume workshops, Graduate Record Examination (GRE) preparation, and more.

## AFFORDABLE EDUCATION

THE MOUNT OFFERS UP TO  
**\$22,000**  
 IN MERIT SCHOLARSHIPS

To see eligibility requirements and other available scholarships, visit [www.msj.edu/scholarships](http://www.msj.edu/scholarships).

## CAREERS IN BIOMEDICAL SCIENCES

DENTIST

MEDICAL DOCTOR

PHARMACIST

PHYSICIAN ASSISTANT

PHYSICAL THERAPIST

VETERINARIAN

## ALUMNI SUCCESS

**100%**  
 CAREER OUTCOMES RATE

100% of 2022 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 74%.



**MOUNT ST. JOSEPH UNIVERSITY®**  
 SCHOOL OF BEHAVIORAL & NATURAL SCIENCES

Office of Admission  
 513-244-4531 | 800-654-9314  
[www.msj.edu](http://www.msj.edu) | [admission@msj.edu](mailto:admission@msj.edu)

**Maria Brown, Ph.D.**  
 Chair, Department of Biology  
 Assistant Professor of Biology  
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# BIOMEDICAL SCIENCES MAJOR - BACHELOR OF SCIENCE

<p style="text-align: center;"><u>Foundation Courses</u></p> <p>BIO 111/BIO 111A Principles of Biology I w/ Lab            BIO 112/BIO 112A Principles of Biology II w/ Lab            BIO 204 Biology Seminar            CED 220 Found. of Professionalism            CHE 111/CHE 111A Gen. Chemistry I w/ Lab            CHE 112/CHE 112A Gen. Chemistry II w/ Lab            PSY 103 Intro to Psychology</p>	<p style="text-align: center;"><u>Pre-Optometry Concentration</u></p> <p>BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab            BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab            BIO 305 Microbiology            CHE 211/CHE 211A Organic Chemistry I w/ Lab            CHE 212/CHE 212A Organic Chemistry II w/ Lab            CHE 325/ CHE 325A Biochemistry I w/ Lab            MTH 174 Statistics            MTH 193 Calculus I            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            + Biology Electives - 16 hours</p>
<p style="text-align: center;"><u>Pre-Chiropractic</u>  <u>Pre-Medical</u>  <u>Pre-Podiatry</u>  <u>Concentration</u></p> <p>CHE 211/CHE 211A Organic Chemistry I w/ Lab            CHE 212/CHE 212A Organic Chemistry II w/ Lab            CHE 325/ CHE 325A Biochemistry I w/ Lab            MTH 174 Statistics I            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            + Biology Electives - 28 hours</p>	<p style="text-align: center;"><u>Pre-Pharmacy Concentration</u></p> <p>BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab            BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab            BIO 305 Microbiology            CHE 211/CHE 211A Organic Chemistry I w/ Lab            CHE 212/CHE 212A Organic Chemistry II w/ Lab            CHE 325/ CHE 325A Biochemistry I w/ Lab            ECO 201 Economic Issues            MTH 174 Statistics            MTH 193 Calculus I            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            + Biology Electives - 16 hours</p>
<p style="text-align: center;"><u>Pre-Dental Concentration</u></p> <p>BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab            BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab            BIO 305 Microbiology            CHE 211/CHE 211A Organic Chemistry I w/ Lab            CHE 212/CHE 212A Organic Chemistry II w/ Lab            CHE 325/ CHE 325A Biochemistry I w/ Lab            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            + Biology Electives - 16 hours</p>	<p style="text-align: center;"><u>Pre-Physical Therapy Concentration</u></p> <p>BIO 130 Medical Terminology            BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab            BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab            MTH 174 Statistics            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            PSY 204 Lifespan Development            + Biology Electives - 18 hours</p>
<p style="text-align: center;"><u>Pre-Occupational Therapy Concentration</u></p> <p>BIO 130 Medical Terminology            BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab            BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab            MTH 174 Statistics            PHY 201/PHY 201A General Physics I w/ Lab            PHY 202/PHY 202A General Physics II w/Lab            PSY 204 Lifespan Development            PSY 340 Abnormal Psychology            + Biology Electives - 18 hours</p>	

# BIOMEDICAL SCIENCES MAJOR - BACHELOR OF SCIENCE

Pre-Physician Assistant Concentration	NOTES																												
<p>BIO 130 Medical Terminology                      BIO 197/BIO 197A Human Anat. &amp; Phys. I w/ Lab                      BIO 198/BIO 198A Human Anat. &amp; Phys. II w/Lab                      BIO 305/BIO 305A Microbiology                      CHE 211/CHE 211A Organic Chemistry I w/ Lab                      CHE 212/CHE 212A Organic Chemistry II w/ Lab                      CHE 325/ CHE 325A Biochemistry I w/ Lab                      MTH 174 Statistics                      PSY 204 Lifespan Development                      + Biology Electives - 12 hours</p>	<p>Prerequisites:                      Chemistry- College preparatory high school chemistry or the successful completion of a placement test.                      Math- Three years of college preparatory high school mathematics including functions.</p> <p>Ethics Required: Recommended Course:                      ETH:PHI 250 Health Care Ethics (3) CE</p> <p>120 credits hours minimum needed to graduate.</p> <p>**Curriculum Guide does not replace advisement by a faculty member within the Biomedical Sciences program and Health Professions Advisor Committee (HPAC).**</p>																												
Pre-Veterinarian Concentration																													
<p>CHE 211/CHE 211A Organic Chemistry I w/ Lab                      CHE 212/CHE 212A Organic Chemistry II w/ Lab                      CHE 325/ CHE 325A Biochemistry I w/ Lab                      CHE 326/CHE 326A Biochemistry II w/Lab                      MTH 174 Statistics I                      PHY 201/PHY 201A General Physics I w/ Lab                      PHY 202/PHY 202A General Physics II w/Lab+                      Biology Electives - 28 hours</p>																													
ADDITIONAL UNIVERSITY CORE REQUIREMENTS for BIOMED majors																													
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">CORE 115 Common Ground</td> <td>Code COR</td> </tr> <tr> <td>Justice &amp; the Common Good</td> <td>Code JCG</td> </tr> <tr> <td>Ethics</td> <td>Code CE</td> </tr> <tr> <td>Experiential Learning</td> <td>Code EXP</td> </tr> <tr> <td>Core Capstone</td> <td>Code CCP</td> </tr> <tr> <td>Speech (COM 100)</td> <td>Code C</td> </tr> <tr> <td>Writing (ENG 101)</td> <td>Code C</td> </tr> <tr> <td>Literature (ENG)</td> <td>Code CL</td> </tr> <tr> <td>Art or Music</td> <td>Code CAM</td> </tr> <tr> <td>History</td> <td>Code CH</td> </tr> <tr> <td>Religious Studies</td> <td>Code CR</td> </tr> <tr> <td>Philosophy</td> <td>Code CP</td> </tr> <tr> <td>Mathematics<sup>#</sup></td> <td>Code CMA</td> </tr> <tr> <td>SOC 103 Our Social World</td> <td>Code CS</td> </tr> </table> <p><sup>#</sup>Math needed for core requirement if not included in chosen concentration</p>	CORE 115 Common Ground	Code COR	Justice & the Common Good	Code JCG	Ethics	Code CE	Experiential Learning	Code EXP	Core Capstone	Code CCP	Speech (COM 100)	Code C	Writing (ENG 101)	Code C	Literature (ENG)	Code CL	Art or Music	Code CAM	History	Code CH	Religious Studies	Code CR	Philosophy	Code CP	Mathematics <sup>#</sup>	Code CMA	SOC 103 Our Social World	Code CS	
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# MOUNT ST. JOSEPH UNIVERSITY®

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513-244-4200  
[www.msj.edu](http://www.msj.edu)

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, veteran status 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 has designated the Vice President of Compliance Risk and Legal Affairs/General Counsel/Title IX Coordinator, (513) 244-4393, 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 Chief Human Resources 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, veteran status or any other legally protected 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-002425/23/800