

# MINOR IN MICROBIOLOGY AND IMMUNOLOGY

Program Contact: Shawna Reed (shawna.reed@qu.edu) 203-582-7486

The Department of Biomedical Sciences offers a minor in microbiology and immunology, which provides students with a fundamental knowledge of the theories, principles and research techniques in this exciting and rapidly evolving field. The program is committed to helping students develop the ability to ask significant scientific questions and then utilize critical thinking skills and modern research laboratory technology to solve these problems successfully.

## Microbiology and Immunology Minor Curriculum

The Microbiology and Immunology minor consists of a minimum of 19 credits, all with a grade of C or better. Students are required to complete BMS 370 General Microbiology and one of the following immunology-based courses listed below. They also are required to take an additional 11-12 credits of elective courses. Students may only receive credit for BMS 375 or BMS 522. Students may only receive credit for BMS 378 or BMS 525 or HSC 378.

Code	Title	Credits
<b>Microbiology Requirement</b>		
BMS 370 & 370L	General Microbiology and General Microbiology Lab	4
<b>Immunology Requirement (take one of the following):</b>		<b>3-4</b>
BMS 375 & 375L	Immunology and Immunology Lab	
BMS 378	Vaccines and Vaccine-Preventable Diseases	
BMS 522 & 522L	Immunology and Immunology Lab	
HSC 378	Vaccines and Vaccine-Preventable Diseases	
<b>Electives (select at least three of the following):</b>		<b>11-12</b>
BMS 299	Biomedical Sciences Journal Club	
BIO 328 & 328L	Human Clinical Parasitology and Human Clinical Parasitology Lab	
BIO 346 & 346L	Cell Physiology and Cell Physiology Lab	
BIO 471 & 471L	Molecular Genetics and Molecular Genetics Lab	
BMS 319	Public Health: Epidemiology of Infectious Diseases	
BMS 372 & 372L	Pathogenic Microbiology and Pathogenic Microbiology Lab	
BMS 373 & 373L	Mycology and Mycology Lab	
BMS 375 & 375L	Immunology and Immunology Lab	
BMS 378	Vaccines and Vaccine-Preventable Diseases	

BMS 470 & 470L	Virology and Virology Lab
BMS 472	Biotechnology (Laboratory Component)
BMS 473	Infections of Leisure
BMS 474	Power of Plagues
BMS 475	Special Topics in Microbiology
BMS 481	Research Techniques in Biomedical Sciences
BMS 482	Independent Study in Microbiology
BMS 483	Independent Study in Microbiology
BMS 479	Microbiology Research
HSC 324	Gut Microbes and Human Health
HSC 378	Vaccines and Vaccine-Preventable Diseases

### Graduate courses for the Microbiology and Immunology Minor (permission required):

BMS 522 & 522L	Immunology and Immunology Lab	4
BMS 525	Vaccines and Vaccine Preventable Diseases	3
BMS 526	Epidemiology	3
BMS 528	Advanced Clinical Parasitology	4
BMS 569	Antimicrobial Therapy	3
BMS 570	Virology (cannot be combined with BMS 470)	4
BMS 573	Mycology	3
BMS 572	Pathogenic Microbiology	4
BMS 575	Food Microbiology	4
BMS 584	Emerging and Re-emerging Infectious Diseases	3
BMS 585	Outbreak Control	3
BMS 595	Transplantation Immunology	3