

Course Requirement Checklist

PhD in Immunology & Microbiology

Baylor
College of
Medicine

GRADUATE
SCHOOL
OF BIOMEDICAL SCIENCES

Students Starting Academic Year: **2024-2025**

Foundations Courses (10 credits):				
	GS-GS-6600	Foundations A: Molecules to Systems	6	
	GS-GS-6400	Foundations B: Biostatistics	4	
Program Keystone Courses (11 credits):				
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	4	
	GS-IY-6305	Experimental Immunology & Microbiology	3	
	GS-IY-6403	Effective Grant Writing	4	
Didactic Elective Courses (at least 9 credits):				
Responsible Conduct of Research Courses (4 credits):				
	GS-GS-5101	Responsible Conduct of Research 1	1	
	GS-GS-5102	Responsible Conduct of Research 2	1	
	GS-GS-5103	Responsible Conduct of Research 3	1	
	GS-GS-5104	Responsible Conduct of Research 4	1	
Professional Development Courses (3 credits):				
	GS-GS-5105	Scientific Writing	1	
	GS-GS-5112	Powerful Presentations	1	
	GS-GS-5113	Designing & Managing Successful Scientific Projects	1	
Seminar/Literature Courses:				
	GS-IY-5100	Student Research Seminar	1	
<i>Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.</i>				
	GS-IY-5105	Seminars in I & M Research	1	
<i>Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.</i>				
	GS-IY-5110	Literature Review in I & M	1	(8 total cr.)
<i>Required in terms 1-4 during the first year and second year.</i>				
Research Hours:				
In each term, students enroll in the number of credits [beyond other coursework] needed to be enrolled full-time (minimum 3 per term)				
	GS-IY-5030	Research Rotation	Var.	
<i>Taken each term when a mentor is not appointed (minimum 3 terms)</i>				
	GS-IY-5040	Special Projects	Var.	
<i>Taken each term after a mentor is appointed, and before candidacy</i>				
	GS-IY-5050	Dissertation	Var.	
<i>Taken each term after a mentor is appointed, and after candidacy is achieved.</i>				

Graduate Degree Plan

PhD in Immunology & Microbiology

Students Starting Academic Year: **2024-2025**

General Degree Requirements:				
<ul style="list-style-type: none"> • Completion of at least 180 term hours • At least 30 of those term hours must be in Didactic courses • Completion of at least three terms of Research Rotation before appointing a major advisor • Students must maintain satisfactory academic progress as detailed in the Student Handbook 				
Year One Requirements:				
Term 1:	GS-GS-6600	Foundations A: Molecules to Systems	3 (Didactic) <i>(two-term course)</i>	Total to Date 14 (7)
	GS-GS-6400	Foundations B: Biostatistics	2 (Didactic) <i>(two-term course)</i>	
	GS-GS-5101	Responsible Conduct of Research 1	1	
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	2 (Didactic) <i>(two-term course)</i>	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
	GS-IY-5030	Research Rotation	3	
Total:			14 (7)	
Term 2:	GS-GS-6600	Foundations A: Molecules to Systems	3 (Didactic) <i>(two-term course)</i>	Total to Date 27 (14)
	GS-GS-6400	Foundations B: Biostatistics	2 (Didactic) <i>(two-term course)</i>	
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	2 (Didactic) <i>(two-term course)</i>	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
	GS-IY-5030	Research Rotation	3	
Total:			13 (7)	
Term 3:	GS-IY-6305	Experimental Immunology & Microbiology	3 (Didactic)	Total to Date 39 (17)
	GS-GS-5105	Scientific Writing	1	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Rotation/Elective Courses	5	
Total:			12 (3)	
Term 4:	GS-IY-6403	Effective Grant Writing	4 (Didactic)	Total to Date 51 (21)
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Hours/Elective Courses	5	
Total:			12 (4)	
Term 5		Research Hours/Elective Courses	12	Total to Date
Total:			12	63 (21)

Year Two Requirements:				
Term 1:	GS-GS-5113	Designing & Managing Successful Scientific Projects	1	Total to Date 75 (21)
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Hours/Elective Courses	9	
			Total:	12
Term 2:	GS-GS-5102	Responsible Conduct of Research 2	1	Total to Date 87 (21)
	GS-GS-5112	Powerful Presentations	1	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Hours/Elective Courses	7	
			Total:	12
Term 3:	GS-IY-5100	Student Research Seminar	1	Total to Date 99 (21)
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Hours/Elective Courses	9	
			Total:	12
<i>Student's Thesis Advisory Committee must be appointed by the end of Term 3 in the student's second year of enrollment.</i>				
Term 4:	GS-IY-5100	Student Research Seminar	1	Total to Date 111 (21)
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	
		Research Hours/Elective Courses	9	
Term 5:		Research Hours/Elective Courses	12	Total to Date
				Total:
<i>Nine additional didactic hours are required for a total of thirty (30)</i>				
Qualifying Exam Requirement:				
<ul style="list-style-type: none"> • Must be taken by the end of the second year of enrollment • Student must complete all prerequisite activities defined by their program before taking the exam 				
Course Requirements beyond Year Two:				
Year Three, Term 3:	GS-GS-5103	Responsible Conduct of Research 3	1	
Year Four, Term 3:	GS-GS-5104	Responsible Conduct of Research 4	1	
Recurring Requirements until Graduation:				
Terms 1-4:	GS-IY-5100	Student Research Seminar		As required
Terms 1-4:	GS-IY-5105	Seminars in I & M Research		As required
Terms 1-5:	GS-IY-5050	Dissertation		As required*
<i>*Students shall enroll in the number of credits of Dissertation needed to be enrolled full-time (12 credits) each term through Graduation.</i>				
Research Course Work:				
GS-IY-5010 Readings		GS-IY-5040 Special Projects		
GS-IY-5030 Research Rotation		GS-IY-5050 Dissertation		
Additional Immunology & Microbiology program courses offered*:				
GS-IY-6200	Principles of Immunology	GS-IY-6205	Microbiome Methodology & Data Analysis	
GS-IY-6201	Cells, Tissues & Organs	GS-IY-6206	Bacterial Pathogenesis	
GS-IY-6202	The Microbiome	GS-IY-6301	Immunology	
GS-IY-6204	Vaccinology			
<i>*Students may select electives from open course options in all graduate programs. Courses may be viewed in the Graduate School Bulletin</i>				