Course Requirement Checklist
PhD in Immunology & Microbiology

Baylor College of Medicine

GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

Students Starting Academic Year: **2026-2027**

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	
Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.				
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.				
	GS-IY-5110	Literature Review in Immunology & Microbiology	1	*4 total cr.*
Required in terms 1 & 2 during the first year and second year.				
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.	
Taken each term when a mentor is not appointed (minimum 3 terms)				
	GS-IY-5040	Special Projects	Var.	
Taken each term after a mentor is appointed, and before candidacy				
	GS-IY-5050	Dissertation	Var.	
Taken each term after a mentor is appointed, and after candidacy is achieved.				

Graduate Degree Plan
PhD in Immunology & Microbiology

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General Degree Requirements:

- 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) *(two-term course)*	
	GS-GS-6400	Foundations B: Biostatistics	2 (Didactic) *(two-term course)*	
	GS-GS-5101	Responsible Conduct of Research 1	1	
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	2 (Didactic) *(two-term course)*	
	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 to Date
		Total:	14 (7)	14 (7)
Term 2:	GS-GS-6600	Foundations A: Molecules to Systems	3 (Didactic) *(two-term course)*	
	GS-GS-6400	Foundations B: Biostatistics	2 (Didactic) *(two-term course)*	
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	2 (Didactic) *(two-term course)*	
	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 to Date
		Total:	13 (7)	27 (14)
Term 3:	GS-IY-6305	Experimental Immunology & Microbiology	3 (Didactic)	
	GS-GS-5105	Scientific Writing	1	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
		Research Rotation/Elective Courses	6	Total to Date
		Total:	12 (3)	39 (17)
Term 4:	GS-IY-6403	Effective Grant Writing	4 (Didactic)	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
		Research Hours/Elective Courses	6	Total to Date
		Total:	12 (4)	51 (21)
Term 5		Research Hours/Elective Courses	12	Total to Date
		Total:	12	63 (21)

Year Two Requirements:

	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	8	
		Total:	12	75 (21)
Term 2:	GS-GS-5102	Responsible Conduct of Research 2	1	
	GS-GS-5112	Powerful Presentations	1	
	GS-GS-5113	Designing & Managing Successful Scientific Projects	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 to Date
		Total:	12	87 (21)
Term 3:	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
		Research Hours/Elective Courses	10	Total to Date
		Total:	12	99 (21)

Student's Thesis Advisory Committee must be appointed by the end of Term 3 in the student's second year of enrollment.

Term 4:	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in Immunology & Microbiology Research	1	
		Research Hours/Elective Courses	10	Total to Date
		Total:	12	111 (21)
Term 5:		Research Hours/Elective Courses	12	Total to Date
		Total:	12	123 (21)

Nine additional didactic hours are required for a total of thirty (30)

Qualifying Exam Requirement:

- 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*

**Students shall enroll in the number of credits of Dissertation needed to be enrolled full-time (12 credits) each term through Graduation.*

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		

**Students may select electives from open course options in all graduate programs.*
Courses may be viewed in the Graduate School Bulletin