

Graduate Degree Plan

PhD in Immunology & Microbiology

Students Starting Academic Year: 2022-2023

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) <i>(two-term course)</i>	Total to Date
	GS-GS-6400	Foundations B: Biostatistics	2 (Didactic) <i>(two-term course)</i>	
	GS-GS-5101	Responsible Conduct of Research 1	1	
	GS-GS-5111	Strategies for Success in Graduate School	1	
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	2 (Didactic) <i>(two-term course)</i>	
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
	GS-IY-5030	Research Rotation	1	
Total:			12 (7)	12 (7)
Term 2:	GS-GS-6600	Foundations A: Molecules to Systems	3 (Didactic) <i>(two-term course)</i>	Total to Date
	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 I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
	GS-IY-5030	Research Rotation	2	
Total:			12 (7)	24 (14)
Term 3:	GS-IY-6305	Experimental Immunology & Microbiology	3 (Didactic)	Total to Date
	GS-GS-5105	Scientific Writing	1	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Rotation/Elective Courses	5	
Total:			12 (3)	36 (17)
Term 4:	GS-IY-6403	Fundamentals of Effective Grant Writing	4 (Didactic)	Total to Date
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Hours/Elective Courses	5	
Total:			12 (4)	48 (21)
Term 5		Research Hours/Elective Courses	12	Total to Date
Total:			12	60 (21)

Year Two Requirements:				
Term 1:	GS-GS-5113	Effective Project Design & Management	1	Total to Date 72 (21)
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Hours/Elective Courses	9	
			Total:	
Term 2:	GS-GS-5102	Responsible Conduct of Research 2	1	Total to Date 84 (21)
	GS-GS-5112	Powerful Presentations	1	
	GS-IY-5100	Student Research Seminar	1	
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Hours/Elective Courses	7	
		Total:	12	
Term 3:	GS-IY-5100	Student Research Seminar	1	Total to Date 96 (21)
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Hours/Elective Courses	9	
			Total:	
<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 108 (21)
	GS-IY-5105	Seminars in I & M Research	1	
	GS-IY-5110	Literature Review in I & M	1	
		Research Hours/Elective Courses	9	
			Total:	
Term 5:		Research Hours/Elective Courses	12	Total to Date 120 (21)
			Total:	12
<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 2-4:	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-5030	Research Rotation		
	GS-IY-5040	Special Projects		
	GS-IY-5050	Dissertation		
Additional Immunology & Microbiology program courses*:				
GS-IY-6100	Principles of Immunology	GS-IY-6204	Vaccinology	
GS-IY-6201	Cells, Tissues & Organs	GS-GS-6205	Microbiome Methodology & Data Analysis	
GS-IY-6202	The Microbiome	GS-IY-6301	Immunology	
GS-IY-6203	Mechanisms of Autoimmunity & Inflammation	GS-IY-6304	Clinical Aspects of Immunology	
		GS-IY-6402	Concepts in Microbial Pathogenesis	
<i>*Students may select electives from open course options in all graduate programs. Courses may be viewed in the AY22 Graduate School Bulletin</i>				

Course Requirement Checklist

PhD in Immunology & Microbiology

Students Starting Academic Year: 2022-2023

Foundations Courses (10 credits):				
	GS-GS-6600	Foundations A: Molecules to Systems	6	
	GS-GS-6400	Foundations B: Biostatistics	4	
Program Core Courses (7 credits):				
	GS-IY-6401	Concepts in Host Immune System-Microbe Interactions	4	
	GS-IY-6305	Experimental Immunology & Microbiology	3	
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 (8 credits):				
	GS-GS-5105	Scientific Writing	1	
	GS-GS-5111	Strategies for Success in Graduate School	1	
	GS-GS-5112	Powerful Presentations	1	
	GS-GS-5113	Effective Project Design & Management	1	
	GS-IY-6403	Fundamentals of Effective Grant Writing	4	
Seminar/Literature Courses:				
	GS-IY-5100	Student Research Seminar	1	
<i>Required in terms 2-4 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	
<i>Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.</i>				
Research Hours:				
In each term, students enroll in the number of credits [beyond other coursework] needed to be enrolled full-time (minimum 1)				
	GS-IY-5030	Research Rotation	Var.	
<i>Taken each term before a mentor is 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 candidacy is achieved.</i>				