Course Requirement Checklist
PhD in Chemical, Physical, & Structural Biology

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 Core Course (3 credits):				
	GS-CP-6301	Molecular Biophysics 1	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 (9 credits):				
	GS-CP-5101	Scientific Thinking 1: Research Principles & Practices	1	
	GS-CP-6202	Scientific Thinking 2: Critical Literature Analysis	2	
	GS-CP-6306	Scientific Thinking 3: Writing & Defending Proposals I	3	
	GS-CP-6307	Scientific Thinking 4: Writing & Defending Proposals II	3	
Seminar/Journal Literature Courses:				
	GS-CP-5100	Student Research Seminar	1	
Required in terms 1-4 every year from matriculation through attainment of Permission-To-Write.				
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-CP-5030	Research Rotation	Var.	
Taken each term when a mentor is not appointed (minimum 3 terms)				
	GS-CP-5040	Special Projects	Var.	
Taken each term after a mentor is appointed, and before candidacy is achieved.				
	GS-CP-5050	Dissertation	Var.	
Taken each term after a mentor is appointed, and after candidacy is achieved.				

Graduate Degree Plan
PhD in Chemical, Physical, & Structural Biology

Students Starting Academic Year: 2026-2027

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-CP-6304	Molecular Biophysics 1	3 (Didactic)	
	GS-CP-5101	Scientific Thinking 1: Research Principles & Practices	1	
	GS-CP-5100	Student Research Seminar	1	
	GS-CP-5030	Research Rotation	3	Total to Date
		Total:	14 (8)	14 (8)
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-CP-6202	Scientific Thinking 2: Critical Literature Analysis	2 (Didactic)	
	GS-CP-5100	Student Research Seminar	1	
		Research Rotation/Elective Course	4	Total to Date
		Total:	12 (7)	26 (15)
Term 3:	GS-CP-6306	Scientific Thinking 3: Writing & Defending Proposals I	3 (Didactic)	
	GS-CP-5100	Student Research Seminar	1	
		Research Rotation/Elective Courses	8	Total to Date
		Total:	12 (3)	38 (18)
Term 4:	GS-CP-6307	Scientific Thinking 4: Writing & Defending Proposals II	3 (Didactic)	
	GS-CP-5100	Student Research Seminar	1	
		Research Hours/Elective Courses	8	Total to Date
		Total:	12 (3)	50 (21)
Term 5:		Research Hours/Elective Courses	12	
		Total:	12	62 (21)

Year Two Requirements:

Term 1:	GS-CP-5100	Student Research Seminar	1	
		Research Hours/Elective Courses	11	Total to Date
		Total:	12	74 (21)

Term 2:	GS-GS-5102	Responsible Conduct of Research 2	1	
	GS-CP-5100	Student Research Seminar	1	
		Research Hours/Elective Courses	10	Total to Date
		Total:	12	86 (21)
Term 3:	GS-CP-5100	Student Research Seminar	1	
		Research Hours/Elective Courses	11	Total to Date
		Total:	12	98 (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-CP-5100	Student Research Seminar	1	
		Research Hours/Elective Courses	11	Total to Date
		Total:	12	110 (21)
Term 5:		Research Hours/Elective Courses	12	Total to Date
			12	122 (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 3, Term 3:	GS-GS-5103	Responsible Conduct of Research 3	1
Year 4, Term 3:	GS-GS-5104	Responsible Conduct of Research 4	1

Recurring requirements through Graduation:

Terms 1-4:	GS-CP-5100	Student Research Seminar	As required*
Terms 1-5:	GS-CP-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-CP-5010	Readings
GS-CP-5030	Research Rotation
GS-CP-5040	Special Projects
GS-CP-5050	Dissertation

Suggested Electives*

Chemical Biology/Pharmacology Emphasis

GS-CP-6205	Chemical Biology	2
GS-CP-6206	Drug Discovery: Bench to Bedside	2
GS-CP-6208	Pharmacology Concepts in Drug Discovery & Development	2

Suggested Electives*

Structural Biology/Biophysics Emphasis

GS-CP-6305	Molecular Biophysics 2	3
GS-CP-6301	Advanced X-ray Crystallography	3
GS-CP-6207	Electron Cryomicroscopy	2

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