



**Biophysics Graduate Student Requirements & Benchmarks**

This is a snapshot of the requirements of your PhD program in Biophysics. For details on any of these requirements, you should consult the Graduate School and/or Biophysics Field websites. **Pay attention to administrative benchmarks and deadlines; these are a part of your program and are your responsibility. If you have questions, do not hesitate to ask!**

Benchmarks/Requirements by Year*		
Year	Benchmark	Deadline
First Year	Meet with DGS before classes start to choose first-year classes	Prior to the start of classes
	Student Center – indicate DGS as Temporary Chair	Within 2 weeks of registration
	Rotations (3): Three 8-week rotations are required of all incoming graduate students. Approximate dates listed on right.	1 <sup>st</sup> – 09/1-12/17 2 <sup>nd</sup> – 1/1-3/13 3 <sup>rd</sup> – 3/16-5/10
	Choose Special Committee Chair	Before August 15
	Online training through <a href="#">Cornell Office of Research Integrity and Assurance (ORIA)</a> in authorship, peer review, and avoidance of research misconduct	Prior to the end of the student’s second registered semester
	Conflict of Interest Form (training grant appointees)	By end of first academic year
Second Year	Take Ethics course <b>BIOMG 7510</b> .	Fall of second year
	Each student makes a half-hour formal presentation of their research results to the other students and faculty annually in the summer.	Beginning in the summer after the second year (and every year following)
Third Year	A-exam: Schedule of Exam form must be filed 7 days prior to the exam; submit the results form within 3 days after the exam.	Before the 5 <sup>th</sup> semester of registration
Fourth Year	Thesis Research!	
Fifth Year	B-Exam: Schedule of Exam form must be filed 7 days prior to the exam; submit the results form within 3 days after the exam.	At least 2 semesters between A & B exams. Typically, Biophysics students graduate in 5-6 years.

\*Refer to page 2 for course requirements.

Annual Requirements	
Registration <b>Three (3) times a year Fall, Spring &amp; Summer</b>	Make sure there are no holds on your account that prevent your registration each semester. You must be registered by sixth week of classes or you will no longer be registered as a grad student. You must register for the summer in order to use university facilities (i.e. libraries) and avoid having with-holding taxes taken out of your check.
Course Enrollment	Federal regulations require <b>12 credits of courses every semester</b> . The Graduate School will automatically enroll you in 12 credit hours of dissertation research at the start of the Fall and Spring semesters. Enroll in any required/desired classes. Credit hours of the GRAD course will be adjusted accordingly after course enrollment is completed. Enroll in GRAD research course in the summer semester.
Presentation of research	Beginning in the summer after the second year, each student makes a half-hour formal presentation of their research results to the other students and faculty.
Progress Report	Must be submitted after annual meeting with the Special Committee (post Biophysics seminar).
Biophysics Seminars	Attend the weekly 4PM Wednesday Biophysics seminars
Frontiers in Biophysics	Attend every annual all-day seminar (held annually in early Fall) Register for BIOMG 4310



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Course Requirements by Year	
Every year	Register for the Frontiers in Biophysics (enroll in BIOMG 4310)
First Year	<p>Typical course load:            Fall semester: two lecture courses plus first rotation.            Winter Break: second rotation starts            Spring semester: two or three lecture courses, the third rotation  <b>Register for the Frontiers in Biophysics (enroll in BIOMG 4310)</b></p>
Second Year	Courses required for minor and <b>BIOMG 7510: Ethical Issues &amp; Professional Responsibilities.</b>
	<b>Register for the Frontiers in Biophysics (enroll in BIOMG 4310)</b> Recommended: <b>BIOMG 8380</b> to learn proposal writing
Prior to A-exam First Year & Second Year	<p><b>Five Learning Objectives:</b> (to be satisfied prior to the A-exam)</p> <ul style="list-style-type: none"> <li>• <b>Advanced Mathematics:</b> One semester of mathematics beyond 4 semesters at the elementary undergraduate level is required, two semesters recommended. For a 1-semester course, <b>CHEM 7870</b> is recommended. Appropriate 2-semester sequences are: (<b>AEP 3200</b> and <b>AEP 4200</b>), (<b>AEP4210</b> and <b>AEP4220</b>).</li> <li>• <b>Physical Chemistry:</b> One course in statistical mechanics and thermodynamics (<b>PHYS 6562</b> or <b>PHYS 7653</b> or <b>CHEM 7950</b> or <b>CHEM 7960</b>) and one course in quantum mechanics (<b>CHEM 3890</b> or <b>CHEM 7930</b> or <b>PHYS 4443</b> or <b>PHYS 6572</b>).</li> <li>• <b>Biochemistry, Molecular and Cell Biology:</b> If you have not had basic biochemistry, take <b>BIOMG 3300</b>, or <b>BIOMG 3310</b> plus <b>BIOMG 3320</b>). To meet the Field requirement: cell biology <b>BIOMG 4320</b> or <b>6360</b> or <b>4370</b>, or biochem lab <b>BIOMG 4400</b>, or <b>BIOMG 6310</b> or <b>6390</b>, with at least a total of five credits at the 400 level or higher.</li> <li>• <b>Computer Literacy or Laboratory Electronics and Instrumentation:</b> In lieu of undergraduate experience, computer experience may be gained through either appropriate courses or research experience. Expertise in instrumentation electronics, if not previously acquired, is available through <b>PHYS 3360</b> or <b>AEP 3630</b>.</li> <li>• <b>Advanced Studies in Molecular Biophysics and Associated Areas of Biological and Physical Science:</b> At least three credits are required. This is typically a graduate course in the area of your thesis work.</li> <li>• <b>Ethics:</b> A course in scientific ethics <b>BIOMG 7510</b> is required of all students.</li> </ul>
Third Year	Thesis research <b>Register for the Frontiers in Biophysics (enroll in BIOMG 4310)</b>
Fourth Year	Thesis research <b>Register for the Frontiers in Biophysics (enroll in BIOMG 4310)</b>
Fifth Year & Beyond	Thesis research <b>Register for the Frontiers in Biophysics (enroll in BIOMG 4310)</b>
<p align="center"><b>General Course Requirements</b></p> <p>Consult with the DGS and/or with members of their Special Committee regarding appropriate courses. Courses that are taken to satisfy requirements should be taken for a letter grade. A minimum of "B" grade is expected. <b>Only one</b> required course may be taken Pass/Fail.</p>	