

PHARMACOLOGY AMP

All students must meet the Requirements for the Accelerated Master's Degree Programs

OVERVIEW

This accelerated master's degree program (AMP) is designed to offer select UVM undergraduate science majors the opportunity to obtain both their bachelor's degree and a master's degree in Pharmacology in a total of five years of study. Students may choose to complete either a thesis-based or non-thesis AMP. The objective of Department of Pharmacology Master's Program is to provide a broad knowledge base of pharmacological concepts, preparing students for careers in pharmaceutical, biotechnology and related industries; or to increase their competitiveness to pursue additional graduate degrees. Research interests in the Department of Pharmacology are diverse, with special emphasis on cardiovascular and cerebrovascular pharmacology, physiology, neurovascular coupling, signal transduction, and medicinal chemistry/cancer chemotherapy.

The Department of Pharmacology offers thesis-based and non-thesis Master of Science degrees. The thesis-based M.S. degree is a course and research based program, with 24 credits in coursework, and 6 credits of research. A thesis is written and there is a defense. A non-thesis M.S. degree requires 30 credits in coursework, but does not require a thesis or a thesis defense. Following acceptance into the program by the Graduate College, students enrolled in this program can take up to six credits of graduate-level courses that will count towards both a bachelor's degree and the master's in pharmacology degree. An additional three credits of graduate level coursework taken after acceptance into the program can be applied towards the master's degree provided that these three credits are not used to fulfill undergraduate degree requirements. Students would then be expected to complete remaining master's degree requirements during a fifth year of study. Full-time graduate student status will start the summer after their undergraduate graduation and will be expected to be maintained until completion of their master's degree in Pharmacology.

SPECIFIC REQUIREMENTS

Requirements for Admission to Graduate Studies for the Degree of Master of Science

- A course background in the sciences (biology, chemistry, physics, etc.) is recommended.
- Graduate Record Examination (GRE) scores are not required.
- A minimum cumulative grade point average of 3.00 is recommended.

Students should apply for admission into the accelerated master's in Pharmacology program in the spring semester of their junior year. Admission to the program requires the following:

- Completion of the Graduate College Application form that must include at least three letters of recommendation, including at least one from a UVM faculty member.
- Students **MUST** be admitted through the Graduate College before taking any courses that will be applied to the Master's degree requirements. Students will start full-time master's degree coursework in the summer following their undergraduate graduation.

MINIMUM DEGREE REQUIREMENTS

A minimum of 30 credits and successful completion of a written comprehensive exam are required for completion of the Accelerated Master's Degree in Pharmacology. Students enrolled in the thesis-based program must also write, present and successfully defend their research thesis. Students must also meet the UVM Graduate College Requirements for the Master's Degree. Courses should be selected from the following lists. Up to two additional graduate level courses (6 credits), approved by the program director may be used towards the 30 credit requirement.

Required Courses:		
PHRM 240	Molecules & Medicine	3
PHRM 290	Topics Molecular&Cell Pharm	3
PHRM 301	Medical Pharmacology	6
PHRM 302	Pharmacological Techniques	1-4
PHRM 381	Seminar	1
MPBP 301	Human Physiology & Pharm I	4
Required for non-thesis masters:		
PHRM 301	Medical Pharmacology	6
Required for thesis masters:		
PHRM 391	Master's Thesis Research	6
Additional courses may be selected from:		
PHRM 201	Introduction to Pharmacology	3
PHRM 272	Toxicology	3
PHRM 305	Milestones in Pharmacology	2
PHRM 373	Readings in Pharmacology	2
MPBP 302	Human Physiology & Pharm II	4
BIOC 301	General Biochemistry	3
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STAT 211	Statistical Methods I	3

Comprehensive Examination

Students are required to pass a written comprehensive exam that will be taken on or around March 15 of the second year (last semester).

The format is a take-home written exam. The questions will be based on the core-curriculum Pharmacology focused courses common to the thesis and non-thesis based tracks. Grading is on a 1-10 scale for each question. An average score of 7 or better is required to pass. If a passing grade is not obtained, one re-take is permitted.

Requirements for Advancement to Candidacy for the Degree of Master of Science

Advancement to candidacy requires satisfactory completion of the comprehensive exam.