



Twin Cities Campus

Pharmacology Minor

Pharmacology

Medical School

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Pharmacology, 6-120 Jackson Hall, 321 Church Street S.E., Minneapolis MN 55455 (612-626-1248; fax: 612-625-8408)

Email: phclgrad@umn.edu

Website: <http://www.pharmacology.med.umn.edu/graduate.html>

- Program Type: Graduate minor related to major
- Requirements for this program are current for Spring 2022
- Length of program in credits (Masters): 9
- Length of program in credits (Doctorate): 12
- This program does not require summer semesters for timely completion.

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Pharmacology is the study of the interactions of chemicals with biological systems. Courses and research training in biochemistry, biophysics, genetics, and molecular biology provide a solid foundation for performing original research in pharmacology, neuropharmacology, and cancer chemotherapy.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

Other requirements to be completed before admission:

Students must be enrolled in a University masters or doctoral program.

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

Required Coursework (9 to 12 credits)

In consultation with the Pharmacology director of graduate studies, select at least 9 credits from the following for a masters minor or at least 12 for the doctoral minor. Other courses may be substituted with Pharmacology director of graduate studies approval.

- [PHCL 5109](#) - Introduction to Scientific Communication (1.0 - 18.0 cr)
- [PHCL 5110](#) - Introduction to Pharmacology (3.0 cr)
- [PHCL 5111](#) - Pharmacogenomics (3.0 cr)
- [PHCL 5112](#) - Foundations of Biomedical Research (1.0 - 2.0 cr)
- [PHCL 8209](#) - Substance Abuse at the Bedside (1.0 cr)
- [PHCL 8211](#) - Advanced Pharmacology (5.0 cr)
- [PHCL 8221](#) - SciComm II: Writing & Research Presentation (2.0 - 3.0 cr)
- [PHCL 8212](#) *{Inactive}* (0.0 - 3.0 cr)

Program Sub-plans

Students are required to complete one of the following sub-plans.

Students may not complete the program with more than one sub-plan.



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