

PHARMACY, DOCTOR OF (PHARM.D.)

Licensure in Montana

An applicant for licensure as a registered pharmacist in Montana must pass national examinations as required by the Montana State Board of Pharmacy. To qualify for the examinations, the applicant must be of good moral character and a graduate of an accredited school of pharmacy with a Doctor of Pharmacy degree; however, an applicant will not receive a license until all requirements have been met.

- Pre-pharmacy coursework must be completed before entering the professional pharmacy program.
- Students should note some pre-pharmacy courses have prerequisites and they should consider that when planning their schedules.
- Applicants to the professional pharmacy program must present proof of having completed at least 20 hours of observation in a pharmacy, other health care or social field, a writing assignment about the experience, and one evaluation form from someone involved with the applicant in such an experience.
- The Pharmacy College Admission Test (PCAT) must be taken within two years of application. Applications for the professional program are submitted through the PharmCAS system. See the School's prospective student webpage (<https://www.umt.edu/pharmacy/prospective-students/>) for more information.

Doctor of Pharmacy

- Students must apply for admission to the professional program (<http://health.umt.edu/pharmacy/>). Students enrolled in the professional pharmacy curriculum are assessed a supplemental fee. This fee does not apply to pre-pharmacy students. Refer to the fees (<https://catalog.umt.edu/expenses-services-organizations/expenses/>) section of this catalog for details.
- Students must demonstrate proficiency in pharmaceutical calculation by successfully completing a competency assessment prior to entering the second professional year.

Special Degree Requirements

Refer to graduation requirements (<https://catalog.umt.edu/academics/graduation-requirements/>) listed previously in the catalog.

Doctor of Pharmacy students must:

1. Meet the general University requirements for graduation.
2. Have a 2.5 GPA to start the Pharm.D. program.
3. Earn a grade point average of 2.0 or higher in each of the following areas:
 - a. all courses attempted at The University of Montana-Missoula (cumulative institutional GPA).
 - b. all courses which carry a pharmacy (PHAR) prefix (pharmacy GPA).
 - c. all required courses in the professional pharmacy curriculum (professional GPA).
4. Required pharmacy course work must be completed with a grade of C- or better.
5. Complete at least six full academic years, including pre-pharmacy instruction, and a minimum of eight semesters of professional

instruction as a full-time student registered for a minimum of twelve credits per semester.

6. Complete not less than 204 credits of course work with a minimum of 142 credits in the professional program.
7. Complete all other accreditation-required activities for pharmacy students (ACPE Standards 2016).

Course Requirements

| Code | Title | Hours |
|--|---|-------|
| Biology | | |
| Complete all of the following courses: | | |
| BIOH 112 | Human Form and Function I | 3 |
| BIOH 113 | Human Form and Function II | 3 |
| BIOB 260 | Cellular and Molecular Biology | 4 |
| General and Organic Chemistry | | |
| Complete all of the following courses: | | |
| CHMY 141N & CHMY 142N | College Chemistry I and College Chemistry I Lab | 5 |
| CHMY 143N & CHMY 144N | College Chemistry II and College Chemistry II Lab | 5 |
| CHMY 221 & CHMY 222 | Organic Chemistry I and Organic Chemistry I Lab | 5 |
| CHMY 223 | Organic Chemistry II | 3 |
| Physics | | |
| Complete all of the following courses: | | |
| PHSX 205N | College Physics I | 4 |
| PHSX 206N | College Physics I Laboratory | 1 |
| Mathematics | | |
| Complete the following course: | | |
| M 162 | Applied Calculus | 4 |
| Complete one of the following courses: | | |
| STAT 216 | Introduction to Statistics | 4 |
| PSYX 222 | Psychological Statistics | |
| SOCI 202 | Social Statistics | |
| Communication & Social Sciences | | |
| Complete all of the following courses: | | |
| COMX 111A or THTR 120A | Introduction to Public Speaking or Introduction to Acting I | 3 |
| PSYX 100S or SOCI 101S | Intro to Psychology or Introduction to Sociology | 3 |
| WRIT 101 | College Writing I | 4 |
| Pre-Pharmacy Electives | | |
| Complete 11 elective credits. Speak with your advisor about completing this requirement. | | 11 |
| Pharmaceutical & Biomedical Sciences | | |
| Complete all of the following courses: | | |
| PHAR 329 | Microbes & Medicines | 4 |
| PHAR 331 | Pharmaceutics | 4 |
| PHAR 341 & PHAR 361 | Pharmaceutical Pathophysiology I and Pharmaceutical Science Lab I | 5 |
| PHAR 342 & PHAR 362 | Pharmaceutical Pathophysiology II and Pharmaceutical Science Lab II | 5 |
| PHAR 371 | Integrated Studies I | 1 |
| PHAR 372 | Integrated Studies II | 1 |

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|----------|------------------------------|---|
| PHAR 381 | Pharmaceutical Biochemistry | 4 |
| PHAR 421 | Medicinal Chemistry I | 3 |
| PHAR 422 | Medicinal Chemistry II | 3 |
| PHAR 443 | Pharmacology & Toxicology I | 4 |
| PHAR 444 | Pharmacology & Toxicology II | 4 |

Clinical Sciences

Complete all of the following courses:

| | | |
|--------------------------------------|---|---|
| PHAR 432 | Clinical Pharmacokinetics | 3 |
| PHAR 451 & PHAR 471 | Therapeutics I and Integrated Studies III | 4 |
| PHAR 452 & PHAR 472 | Therapeutics II and Integrated Studies IV | 4 |
| PHAR 553 & PHAR 571 | Therapeutics III and Integrated Studies V | 5 |
| PHAR 554 & PHAR 563 & PHAR 572 | Therapeutics IV and Pharmaceutical Care Lab V and Integrated Studies VI | 6 |
| PHAR 565 | Pharmacy APPE Preparation | 3 |

Social, Behavioral & Administrative Sciences

| | | |
|---|--|---|
| PHAR 300 & PHAR 360 | Pharmacy Practice I and Pharmacy Practice Lab I | 5 |
| PHAR 310 | Pharmacy Practice II | 2 |
| PHAR 311 | Healthy People | 1 |
| PHAR 350 | Introduction to Drug Information | 1 |
| PHAR 412 & PHAR 463 | Pharmacy Practice III and Pharmaceutical Care Lab III | 3 |
| PHAR 460 | Pharmaceutical Care Lab II | 1 |
| PHAR 505 & PHAR 560 | Pharmacy Practice IV and Pharmaceutical Care Lab IV | 4 |
| PHAR 506 | Pharmacy Practice V | 3 |
| PHAR 514E | Case Studies in Pharmaceutical Ethics | 3 |
| PHAR 550 | Drug Literature Eval | 2 |
| PHAR 559 | Public Health and Pharmacoeconomics | 3 |
| 3 credits of elective courses. Please see your advisor for courses that will complete this requirement. | | 3 |

Introductory Pharmacy Practice Experiences (IPPE)

Complete all of the following courses:

| | | |
|----------|-------------------------|---|
| PHAR 480 | Community Pharmacy IPPE | 3 |
| PHAR 481 | Hospital Pharmacy IPPE | 3 |
| PHAR 579 | Community Pharmacy APPE | 6 |
| PHAR 580 | Hospital Pharmacy APPE | 6 |
| PHAR 581 | Inpatient APPE | 6 |
| PHAR 582 | AMB Care APPE | 6 |

Complete 18 credits of the following courses: 18

| | | |
|----------|---------------------------|--|
| PHAR 583 | Drug Information APPE | |
| PHAR 584 | Specialized Services APPE | |
| PHAR 585 | Geriatric APPE | |
| PHAR 586 | Clinical Specialty APPE | |
| PHAR 587 | Administrative APPE | |
| PHAR 588 | Research APPE | |
| PHAR 589 | Education APPE | |

Total Hours**204**