

# Pharmacy Major

## Major Requirements

Degree Type: Pharm.D.

Minimum Degree Credits to Graduate: 156

## Professional Pharm.D. Requirements

The following Pharm.D. requirements included here are subject to change per department. Students follow the curricula developed by the School of Pharmacy and any changes that occur while in the program will be communicated to the students by the School of Pharmacy. All courses must be completed with a grade of "C" or higher or "P" if a pass/fail course.

**In addition to curriculum listed below, 6 credits of Professional Elective MUST be completed PRIOR to P4 year. Other changes to curriculum will be conveyed to students as they are approved.**

| Code                               | Title   | Credits |
|------------------------------------|---|---------|
| <b>P1 First Year Professional</b>  |   |         |
| MICR 470                           | Basic Immunology  | 3       |
| PSCI 367                           | Pharmaceutical Calculations                             | 1       |
| PSCI 368                           | Pharmaceutics I   | 3       |
| PSCI 369                           | Pharmaceutics II  | 2       |
| PSCI 410                           | Pharmaceutical Biotechnology                            | 2       |
| PSCI 411                           | Principles of Pharmacokinetics and Pharmacodynamics     | 3       |
| PSCI 412                           | Chemotherapeutic/Infectious Disease Pharmacodynamics    | 3       |
| PSCI 470                           | Pharmacokinetics  | 3       |
| PHRM 301                           | Top Drugs I   | 1       |
| PHRM 340                           | Patient Assessment and Pathophysiology I                | 4       |
| PHRM 341                           | Pathophysiology II                                      | 3       |
| PHRM 351L                          | Pharmacy Practice Laboratory I                          | 2       |
| PHRM 353                           | Introduction to Pharmacy and the Health Care System     | 3       |
| PHRM 360                           | Introduction to Drug Literature                         | 1       |
| PHRM 455                           | Community Introductory Pharmacy Practice Experience     | 4       |
| PHRM 565                           | Pharmacy-Based Immunization Delivery                    | 1       |
| <b>P2 Second Year Professional</b> |   |         |
| PSCI 413                           | Endocrine/Respiratory/GI Pharmacodynamics               | 3       |
| PSCI 414                           | Cardiovascular Pharmacodynamics                         | 3       |
| PSCI 415                           | Neuropsychiatry Pharmacodynamics                        | 3       |
| PSCI 417                           | Pharmacogenomics  | 2       |
| PHRM 355                           | Institutional Introductory Pharmacy Practice Experience | 4       |
| PHRM 400                           | Top Drugs II  | 1       |
| PHRM 450                           | Self Care   | 3       |
| PHRM 452L                          | Pharmacy Practice Laboratory II                         | 2       |
| PHRM 480                           | Evidence Based Medicine                                 | 2       |
| PHRM 532                           | Infectious Disease                                      | 3       |
| PHRM 534                           | Rheumatology/Endocrinology/Gastrointestinal             | 3       |
| PHRM 535                           | Hematology and Oncology                                 | 3       |
| PHRM 538                           | Cardiovascular and Pulmonary Diseases                   | 4       |
| <b>P3 Third Year Professional</b>  |   |         |
| PHRM 500                           | Top Drugs III   | 1       |
| PHRM 520                           | Special Populations                                     | 3       |
| PHRM 536                           | Neurology & Psychiatry Pharmacotherapy                  | 3       |
| PHRM 537                           | Renal Disease/Fluid and Electrolytes                    | 2       |
| PHRM 540                           | Public Health for Pharmacists                           | 3       |
| PHRM 545L                          | Pharmacotherapy Laboratory                              | 1       |

|   |  |            |
|---|--|------------|
| PHRM 551L   | Pharmacy Practice Laboratory III                     | 2          |
| PHRM 552L   | Pharmacy Practice Laboratory IV                      | 2          |
| PHRM 560  | Specialty Care Topics                                | 2          |
| PHRM 570  | Pharmacy Practice Improvement and Project Management | 2          |
| PHRM 572  | Pharmacy Law and Ethical Considerations              | 3          |
| PHRM 575  | Pharmacy Practice Management                         | 3          |
| PHRM 580  | Pharmacotherapy Capstone                             | 3          |
| <b>Professional Electives <sup>1</sup></b>  |  | <b>6</b>   |
| <b>P4 Fourth Year Professional</b>  |  |            |
| Essentials for Pharmacist Licensure I-III   |  |            |
| PHRM 576  | Essentials for Pharmacist Licensure I                | 1          |
| PHRM 577  | Essentials for Pharmacist Licensure II               | 2          |
| PHRM 578  | Essentials for Pharmacist Licensure III              | 2          |
| Student will choose 8 out of 9 rotations for a total of 40 credits. Each rotation is 5 credits. |  | 40         |
| PHRM 581  | Advanced Pharmacy Practice Experience - Rotation I   |            |
| PHRM 582  | Advanced Pharmacy Practice Experience - Rotation II  |            |
| PHRM 583  | Advanced Pharmacy Practice Experience - Rotation III |            |
| PHRM 584  | Advanced Pharmacy Practice Experience - Rotation 4   |            |
| PHRM 585  | Advanced Pharmacy Practice Experience - Rotation 5   |            |
| PHRM 586  | Advanced Pharmacy Practice Experience - Rotation 6   |            |
| PHRM 587  | Advanced Pharmacy Practice Experience - Rotation 7   |            |
| PHRM 588  | Advanced Pharmacy Practice Experience - Rotation 8   |            |
| PHRM 589  | Advanced Pharmacy Practice Experience - Rotation 9   |            |
| <b>Total Credits</b>  |  | <b>156</b> |

<sup>1</sup> List of professional electives in handbook/Blackboard. Must be completed before P4 year.

## Students applying to the Doctor of Pharmacy Program

- Applicants who are NOT currently NDSU students must submit official transcripts of all previous academic work to the University's Admissions Office.
- Students not previously enrolled at NDSU must apply both to NDSU and to the School of Pharmacy within College of Health and Human Sciences. Visit NDSU's application page (<https://www.ndsu.edu/apply/>) to apply.