

BS Pharm Sci

Bachelor of Science in Pharmaceutical Sciences

Under Review | Spring 2026

Proposal Information

Status

Active

Workflow Status

In Progress

Faculty Senate Approval, Faculty Senate

expand ▲

Waiting for Approval | Faculty Senate Approval

Nancy Middlebrook

Theresa Sherman

Changes

- Program Description
- Emphasis Rules
- participants
- Proposed Effective Term and Year
- Program Justification

Proposal Information

Sponsoring faculty/staff member

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College

College of Pharmacy

Department

Pharmacy

Campus

Health Sciences Center
(Albuquerque)

Effective Term and Year

Proposed

Proposed Effective Term and Year

Spring 2026

Existing

Proposed Effective Term and Year

Fall 2025

Justification

Proposed

Program Justification

The updates are to update the catalog to update wording to better describe the programs and the different concentrations. In addition, the updates will allow focus on the Research and Development track, which is open to all students. The Clinical Emphasis is only open to students admitted to the PharmD program.

Update to elective wording allows more elective options and better reflects course offerings in the College of Pharmacy

Existing

Program Justification

The Clinical Emphasis BS degree course requirements are being edited to align with the PharmD current prerequisite requirements. The PharmD prerequisite requirements underwent changes that impact students in this program as the Clinical Emphasis is designed as a degree pathway only open to students accepted to the PharmD program. Included changes are as follows: Deletion of Physics 1 and 2 and Calculus. College Algebra was added as a required course. Additional PharmD first year courses were added. Removal of Biochemistry as required, but listed as an option for fulfilling support hours for the degree. Additional hours of support courses were added to ensure 120 hours for the program. Miscellaneous errors were also resolved.

Program Category and Level

Program Category

Program

Program Level

Undergraduate

Degree, Minor, or Certificate Name

Bachelor of Science in Pharmaceutical
Sciences

Degree Type

Bachelor of Science

Degree/Certificate Level

Undergraduate

Is this program also offered online?

No

Associated Forms

Select any associated course forms that exist

Select any associated program forms that exist

Shared Credit and Dual Degree information

Interdepartmental Program

No

Catalog Information

Proposed

Program Description

The undergraduate Bachelor of Science in Pharmaceutical Sciences program is an interdisciplinary program that provides students with a broad understanding of the pharmaceutical sciences, including the biological, pharmacological, and chemical principles of drug delivery and the drug discovery and development process. Two different programs of study are offered: a **Research and Development Emphasis** and a **Clinical Emphasis**. Our Pharmaceutical Sciences programs will provide students with foundational knowledge in the science of drug discovery, development, and delivery, along with critical thinking and communication skills necessary for their future success. *(Please note: Undergraduate Pharmacy courses do not count towards a PharmD degree.)*

The **Research and Development Emphasis** is a unique interdisciplinary program incorporating scientific principles of pharmacology, physiology, biochemistry, medicinal chemistry, and pharmaceuticals and prepares students for careers in the pharmaceutical, biotechnology, and cosmetic industries. Students learn the biological, pharmacological, medicinal chemistry, and pharmaceutical principles of drug discovery, development, delivery, and manufacturing. The elective courses allow students to explore their own individual interests and align the program of study with their own personal career goals. Graduates of this degree program can find employment in areas such as drug discovery, product formulation and manufacturing, regulatory affairs, commercialization, and pharmaceutical sales and marketing. Graduates of this program are particularly well-positioned to pursue advanced degrees in the pharmaceutical, medical, and biomedical sciences. *(Please note: Pharmacy courses in the Research Emphasis bachelor's degree program do not count towards a PharmD degree.)*

The **Clinical Emphasis** is intended for students interested in becoming a pharmacist and is offered only to students who have been accepted into the Pharm.D. program. Students can apply for this undergraduate degree after completing their first year of the Pharm.D. program.

Existing

Program Description

Applicants to the B.S. in Pharmaceutical Sciences program must meet admission requirements to both the Pharm.D. program and the University of New Mexico. Pharm.D. applications are only accepted through the PharmCAS online application service. After admission to the Pharm.D. program, students can choose to apply for the undergraduate degree after their first year of pharmacy study. Graduates of the B.S. in Pharmaceutical Sciences program will demonstrate:

- A broad knowledge of pharmaceutical and related sciences;
- An understanding of drug discovery, development, and commercialization;
- Effective written and oral communication skills;
- An ability to integrate and apply knowledge to solve problems; and
- Ethical and socially responsible conduct.

In addition, the College of Pharmacy offers a Bachelor of Science in Pharmaceutical Sciences (research and development track) for those students who do not intend on becoming a pharmacist, but rather choose to work in the pharmaceutical sciences field. Students who complete this degree will have the knowledge and skills to work in the flourishing

pharmaceutical, cosmetics, chemical and related industries. Graduates of the proposed program can be employed in areas such as drug discovery, research and development, product formulation and manufacturing, clinical research, pharmacokinetics and metabolism.

Admissions Requirements

Graduation Requirements

Professional Credential/Licensure Program Information

License/Certification associated with program

No

Degree Information

Degree Hours

120

Minimum Major Hours

Professional Accrediting Bodies

Degree Requirements

Requirements

- Earn at least 120 credits from the following types of courses:
Complete either the Clinical Track or the Research and Development Track

Grand Total Credits: 120

Concentrations

Program Concentrations

Code

Title

Concentration Required

No

Emphases

Emphasis required

Yes

Emphasis Hours

Emphasis Rules

Research and Development

Emphasis

- Complete all of the following
 - Complete the following:
 - CHEM1215 - General Chemistry I for STEM Majors (3)
 - CHEM1215L - General Chemistry I for STEM Majors Laboratory (1)

- MATH1430 - Applications of Calculus I (3)
- PHRM105 - Introduction to Pharmacy Practice and Pharmaceutical Sciences (3)
- CHEM1225 - General Chemistry II for STEM Majors (3)
- CHEM1225L - General Chemistry II for STEM Majors Laboratory (1)
- ENGL1120 - Composition II (3)
- MATH1350 - Introduction to Statistics (3)
- BIOL2210 - Human Anatomy and Physiology I (3)
- BIOL2305 - Microbiology for Health Sciences (4)
- PHYS1230 - Algebra-Based Physics I (3)
- BIOL2225 - Human Anatomy and Physiology II (3)
- CHEM302 - Organic Chemistry (3)
- CHEM304L - Organic Chemistry Laboratory (1)
- PHYS1240 - Algebra-Based Physics II (3)
- PHRM301 - Applied Biochemistry (3)
- PHRM305 - Fundamentals of Pathophysiology and Immunology (3)
- CHEM2310C - Quantitative Analysis Lecture and Laboratory (4)
- PHRM302 - Physical Pharmacy and Biopharmaceutics (3)
- PHRM310 - Fundamentals of Pharmacokinetics and Dosage Forms (3)
- PHRM311 - Introduction to Pharmacology and Medicinal Chemistry (4)
- PHRM315 - Pharmaceutical Sciences Laboratory Techniques (3)
- PHRM424 - Dosage Forms (3)
- PHRM435 - Quality Control and Regulatory Affairs (3)
- PHRM493 - Pharmaceutical Sciences and Toxicology Seminar (1)
- PHRM476 - Molecular and Cellular Pharmacology (3)
- PHRM493 - Pharmaceutical Sciences and Toxicology Seminar (1)
- CHEM301 - Organic Chemistry (3)
- CHEM303L - Organic Chemistry Laboratory (1)
- BIOL2101 - Principles of Biology: Molecules to Cells (3)
- BIOL2103L - Principles of Biology: Introductory Laboratory (1)
- BIOL302C - Genes to Genomes: Lecture and Laboratory (4)
- Earn at least 3 credits from the following:
 - ENGL1110 - Composition I (3)
 - ENGL1110Y - Composition I: Stretch II (3)
 - ENGL1110Z - Enhanced Composition (4)
- Earn at least 8 credits from the following types of courses:
Elective: PHRM **300-400-level courses**
- Earn at least 21 credits from the following types of courses:
In addition to the program-specific requirements outlined here, all undergraduate students are required to fulfill UNM's General Education Program requirements. In some instances, courses included in an undergraduate degree program's requirement may also fulfill a General Education requirement. Please review the General Education Program in this Catalog for General Education information.
- Earn at least this many additional elective credits: 3

Clinical Emphasis

- Complete all of the following
 - Complete the following:
 - CHEM1215 - General Chemistry I for STEM Majors (3)
 - CHEM1215L - General Chemistry I for STEM Majors Laboratory (1)
 - ENGL1120 - Composition II (3)
 - CHEM1225 - General Chemistry II for STEM Majors (3)

- CHEM1225L - General Chemistry II for STEM Majors Laboratory (1)
 - CHEM303L - Organic Chemistry Laboratory (1)
 - BIOL2210 - Human Anatomy and Physiology I (3)
 - BIOL2305 - Microbiology for Health Sciences (4)
 - CHEM302 - Organic Chemistry (3)
 - CHEM304L - Organic Chemistry Laboratory (1)
 - BIOL2225 - Human Anatomy and Physiology II (3)
 - MATH1350 - Introduction to Statistics (3)
 - PHRM701 - Applied Biochemistry (3)
 - PHRM704 - Public Health (2)
 - PHRM705 - Fundamentals of Pathophysiology and Immunology (3)
 - PHRM707 - Introduction to Pharmacy Practice and Communication (2)
 - PHRM709 - Pharmacy and Health Care Delivery Systems (2)
 - PHRM717 - Introduction to Law, Ethics and Social Issues in Pharmacy (2)
 - PHRM702 - Physical Pharmacy and Biopharmaceutics (3)
 - PHRM710 - Fundamentals of Pharmacokinetics and Dosage Forms (3)
 - PHRM711 - Introduction to Pharmacology and Medicinal Chemistry (4)
 - PHRM713 - Aspects of Patient Care II (2)
 - PHRM715 - Introduction to Clinical Reasoning, Self-Care, and Non-Prescription Therapeutics (2)
 - MATH1220 - College Algebra (3)
 - PHRM719 - Professional Development I (1)
 - PHRM729 - Professional Development II (1)
 - PHRM703 - Aspects of Patient Care I (3)
 - CHEM301 - Organic Chemistry (3)
 - BIOL2101 - Principles of Biology: Molecules to Cells (3)
 - BIOL2103L - Principles of Biology: Introductory Laboratory (1)
 - BIOL302C - Genes to Genomes: Lecture and Laboratory (4)
- Complete at least 1 of the following:
 - ECON2120 - Microeconomic Principles (3)
 - ECON2110 - Macroeconomic Principles (3)
 - Earn at least 3 credits from the following:
 - ENGL1110 - Composition I (3)
 - ENGL1110Y - Composition I: Stretch II (3)
 - ENGL1110Z - Enhanced Composition (4)
 - Earn at least 3 credits from the following types of courses:
Communication or CJ courses (beyond communications course required for general education)
 - Earn at least 3 credits from the following types of courses:
Critical Thinking selectives, including ONE of the following: PHRM 105, PHIL 1115, PHIL 1120, PHIL 1130, PHIL 2140, ENGL 2120, MATH 1130, Math 1230, Math 1430, BIOL 2102, Any additional 300 or 400 level Biology and Chemistry course
 - Earn at least 31 credits from the following types of courses:
In addition to the program-specific requirements outlined here, all undergraduate students are required to fulfill UNM's General Education Program requirements. In some instances, courses included in an undergraduate degree program's requirement may also fulfill a General Education requirement. Please review the General Education Program in this Catalog for General Education information. The College of Pharmacy allows 3 credit hours of undergraduate Biochemistry to count toward these hours.

Sample Degree Plan

Sample Degree Plan Upload

- BS Clinical Degree Plan.docx
- BSPS-R&D Curriculum.docx

Program Learning Outcomes

Learning Outcomes

Upon completion of this program, graduating students will demonstrate:

- A broad knowledge of pharmaceutical and related sciences;
- An understanding of drug discovery, development, and commercialization;
- Effective written and oral communication skills;
- An ability to integrate and apply knowledge to solve problems; and
- Ethical and socially responsible conduct.