Introduction
The Bachelor of Science in Pharmaceutical Sciences (BSPS) offers two pathways, the BSPS and the BSPS/PharmD, that afford graduates a great degree of flexibility. All students, regardless of their pathway will be admitted to the BSPS program in their third undergraduate year or upon meeting all the requirements. Of the students who are admitted to the BSPS program, some will also seek admission to the PharmD program. Admission to the BSPS program does not guarantee admission into the PharmD program. BSPS students admitted to the PharmD program will be considered professional students for the fourth year of their BSPS program. BSPS graduates are prepared for careers in the pharmaceutical industry, pharmaceutical research, pharmaceutical administration, and pharmaceutical sales, biotechnology, drug manufacturing, regulatory affairs, and many other related fields. It also situates the graduate perfectly for additional study at a professional school or graduate school. Graduates with the BSPS/PharmD will be more competitive than other non-bachelor’s PharmD graduates in Illinois and in the region for employment, residencies, fellowships, and graduate school.

Admission
Admission into the BSPS program occurs during the fall semester only. The BSPS offers two pathways—the BSPS Pathway and the BSPS/PharmD Pathway. Students in all pathways will be admitted to the BSPS program in their third undergraduate year or upon meeting all the requirements described below.

For full consideration, the following minimum admission criteria must be met:
- 2.75/4.00 cumulative transfer GPA
- 2.50/4.00 science/math GPA
- Completion of a minimum of 58 hours of college-level course work, including the Pre-Pharmaceutical Sciences Requirements listed on the BSPS degree page in the catalog. A grade of C or above must be earned in all course work.
- Pre-Pharmaceutical Sciences course work can be completed at UIC or at another college or university. Applicants can view information about course equivalencies and how courses transfer to UIC and the College of Pharmacy through Transferology. See the Office of Admission Transfer Guide for more information about transfer admission requirements.

BSPS/PharmD Pathway
Students pursuing the BSPS/PharmD Pathway apply to the PharmD program during their third undergraduate year. The application to the PharmD Program is separate from the BSPS application. Admission requirements and information for the PharmD program can be found on the College of Pharmacy website. Admission to the BSPS program does not guarantee admission into the PharmD program. BSPS students admitted to the PharmD Program will be considered professional students for the fourth year of their BSPS Program.

Degree Requirements
To earn College of Pharmacy degree from UIC, students need to complete university and college degree requirements, which are outlined below.

Semester Hour Requirement

<table>
<thead>
<tr>
<th>Major</th>
<th>School</th>
<th>Degree Conferred</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Sciences</td>
<td>Pharmacy</td>
<td>BS in Pharmaceutical Sciences</td>
<td>120</td>
</tr>
</tbody>
</table>

Course Requirements
See the BS in Pharmaceutical Sciences page for Course Requirements.

General Education Core
General Education at UIC is designed to serve as a foundation for lifelong learning. Students are required to complete a minimum of 24 semester hours in the General Education Core with at least one course from each of the following categories:
- a. Analyzing the Natural World
- b. Understanding the Individual and Society
- c. Understanding the Past
- d. Understanding the Creative Arts
- e. Exploring World Cultures
- f. Understanding U.S. Society

For a description and a list of courses for each General Education Core category, students should consult the General Education section of the catalog. Information on meeting the General Education requirements for this program is listed in the Pre-Pharmaceutical Sciences Requirement course list.

General Education Proficiencies—University Writing Requirement
As noted in the Pre-Pharmaceutical Studies course list, College of Pharmacy students meet the requirement by achieving a grade of C or above in ENGL 160 and ENGL 161.

Other Requirements
Grade Point Average (GPA) Requirement
At a minimum, BSPS students must receive a C or above in all major courses within the program and have a minimum of 2.00/4.00 in work taken at the University of Illinois Chicago, in all work taken in the major, and in all work accepted by the university as transfer hours. All students in the fourth year of the program will adhere to the faculty expectations for achievement in College of Pharmacy courses.

Graduation Declaration/Filing to Graduate
Students declare their intent to graduate online using my.UIC. The deadline for submission to the Pending Degree List is the end of the third week (fall and spring) or second week (Summer Session 2) of the term in which graduation is sought. Failure to submit the request at this
time may delay the awarding of the degree. A final review will be made following the close of the term. If a student has satisfactorily completed all the degree requirements, the student’s name will be placed on the official degree list.

Enrollment Residence Requirement
At a minimum, the last 30 semester hours of university work must be taken at the University of Illinois Chicago. Concurrent attendance at the University of Illinois Chicago and another collegiate institution or enrollment during the summer at another institution, when approved by the student’s college, does not interrupt the UIC enrollment residence requirement for graduation.

Transfer Credit
Course work completed at other colleges and universities may apply toward partial fulfillment of graduation requirements and may be used as prerequisites for courses at UIC. The University of Illinois Chicago is a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows for the transfer of the IAI-approved General Education Core Curriculum between participating institutions. Please consult Illinois Articulation Initiative in the Admissions section of the catalog. The final decision, however, regarding the acceptance of credit and courses that apply toward degree requirements is made by the College of Pharmacy. Students who transfer course work may anticipate some loss of credit. This might require more time to complete the degree than had been originally planned. When the loss of credit occurs, it does not imply a negative evaluation of a student’s transfer work but rather a lack of appropriateness for the programs of the college. For more information regarding the transferability of credits prospective students may create an account at Transferology.

Transfer Credit for Continuing Students
Continuing students planning to take non-UIC courses must get prior approval from the College of Pharmacy.

College Policies
Academic Load
To be considered full-time, a student must be enrolled in a minimum of 12 semester hours fall and spring terms. During the regular academic year, an academic course load exceeding 18 semester hours must be approved in the College Office of Academic Programs.

Academic Probation and Dismissal Rules
Deficit Points and Academic Recovery
To better understand probation, dismissal, and academic recovery, it is important to understand deficit points. Students who have earned a UIC total GPA below a 2.00 will have negative deficit points. Deficit points are calculated as follows: multiply the number of semester hours for each course taken by the points for the grade received, A+=2, B+=1, C=0, D=−1, F=−2. Add the points for each course taken during the semester. The total equals the deficit points used to determine probation status and dismissal. For every negative deficit point earned, an equivalent in positive points must be earned to offset the negative, returning the GPA to 2.00, and good academic standing. As an example, students with a -14 deficit would need a subsequent semester of 14 semester hours of B grades, with nothing less than a C in order to return to good standing. A personalized degree audit found in uAchieve detail academic deficit, semester, and total GPAs.

Probation Rules
A student will be placed on academic probation in any term in which either their UIC total or semester grade point average (GPA) is less than 2.00/4.00. Academic probation at UIC cannot be removed by course work from other colleges or universities, including programs of the Springfield and Urbana-Champaign campuses.

A student who earned probation as the result of a semester GPA below a 2.00, but has a UIC total GPA above a 2.00, must earn a 2.00 GPA the following term to regain good academic standing. Probation students with a UIC total GPA below a 2.00 must earn equal to or greater than a 2.00 during their next term. It is required that students reach a UIC total GPA greater than or equal to a 2.00 GPA to graduate.

In an effort to ensure progress-to-degree, the college may prohibit continued enrollment in areas where the student consistently fails to meet minimum academic standards. The college will notify the student of these limitations in the form of an academic contract which will be enforced through the use of an academic progress hold. For assistance in choosing a major, see Major Exploration and Career Development. Additionally, the college may require additional mandatory advising and the creation of a success plan to promote continued enrollment and positive progress-to-degree.

Dismissal Rules
The college is greatly concerned with student success and occasionally must take steps to encourage a student to remediate academic deficits and/or reevaluate their commitment to higher education. After careful consideration of a student’s ability to recover from academic difficulty, the college may elect to academically dismiss a student and cancel their continuing student status.

In any term, a student may be dismissed for one or more of the following reasons:

a. First-term students will be dismissed after their first term of enrollment if they earn zero credit, a grade point average of less than 1.00/4.00, or obtain a deficit of -15 points or more.
b. Continuing students will be dismissed at the end of any term in which their deficit points are -15 or more.
c. Failure to earn any credit.
d. Failure to earn at least a 2.00/4.00 GPA while on probation.
e. Failure to meet the conditions of an academic contract.
f. Failure to meet conditions specified at the time of admission.
g. Failure to make progress toward completion of a College of Pharmacy degree.
h. Two or more consecutive terms of university withdrawals.

Appeal of a Dismissal Decision
Students who have been dismissed may apply for readmission after two terms (excluding the summer session), applications originate at the office of admissions. It is important to note, that students are afforded 15 weeks to complete a term withdrawal, available online, through the last day of instruction. In the event that serious health or personal issue prevented the student from completing the online term withdrawal by the deadline, or extenuating circumstances prevented the student from completing finals, students will have the limited opportunity to meet with the Assistant Dean of Undergraduate Education in the College of Pharmacy to petition for immediate reinstatement. The student may
request immediate reinstatement by following the guidelines as outlined in the college dismissal letter.

**Change of Course Schedule**

Undergraduate students may drop courses using my.UIC through the end of the second week of classes for fall and spring semesters, the first Wednesday of Summer Session 1, or the first Friday of Summer Session 2. During weeks 3 through 10 of the fall and spring semesters (first Thursday through the third Wednesday of Summer Session 1 or weeks 2 through 5 of Summer Session 2), students may drop courses with the permission of their major college. If the drop occurs between 0 and 2 weeks in fall and spring, there will be no notation on the transcript. If the drop occurs during weeks 3 through 10 in fall and spring (first Thursday through the second Wednesday of Summer Session 1 or weeks 2 through 5 of Summer Session 2), a W is noted on the transcript. Undergraduate students may drop a maximum of 4 UIC individual courses that result in a W notation on their transcript during their entire undergraduate degree program.

**Class Attendance**

Each instructor establishes the attendance policy for the class, including penalties for nonattendance. Failure to attend classes does not result in automatic withdrawal from a course. The college expects that students will attend all classes.

**Course Prerequisites**

A student must satisfy the prerequisites before enrolling in a course. A student enrolling in a course without having met the prerequisites may be withdrawn from the course. Course prerequisites are listed in both the course descriptions in this catalog and the Schedule of Classes. Only the instructor may waive the prerequisite, if given evidence that the student is adequately prepared to pursue the subject.

**Credit/No Credit Option**

A student must consult with the Assistant Dean of Undergraduate Education to determine whether Credit/No Credit is an option.

**Double Major, Double Degrees, and Second Bachelor’s Degree**

**Double Major**

The BSPS degree is the College of Pharmacy’s only undergraduate degree. Therefore, it is not an option for a student to double major.

**Double Degrees**

In some cases, a BSPS student may receive two degrees concurrently. A student wishing to earn a double degree must consult with the Assistant Dean of Undergraduate Education. Generally speaking, the student must complete 30 semester hours of credit at UIC beyond the requirements for the first degree in courses not offered for the first degree. In addition, the student must complete all requirements for both degrees. Double degrees will not be approved if the BSPS degree and the proposed second degree involve the study of a similar area or substantial duplication of course work.

For the purposes of declaration, a student must be in good academic standing. A BSPS student must consult an academic advisor in the College of Pharmacy to initiate a request for double degrees. The college does not approve requests for more than two bachelor’s degrees.

The following double degree program combinations are prohibited:

- BS in Pharmaceutical Sciences/BS in Biochemistry
- BS in Pharmaceutical Sciences/BA in LAS Major in Chemistry
- BS in Pharmaceutical Sciences/BS in LAS Major in Integrated Health Studies, Concentration in Behavioral Health
- BS in Pharmaceutical Sciences/BS in LAS Major in Integrated Health Studies, Concentration in Health and Science

**Second Bachelor’s Degree**

Students who have already earned a bachelor’s degree at UIC or another institution are required to follow the same application procedures as all other applicants in order to pursue a second bachelor’s degree. Students must complete all requirements for the second degree as specified by the college and the major department, including a minimum of 30 semester hours beyond those required for the first degree. The UIC enrollment residence requirement must also be met, i.e., the last 30 semester hours for the second degree must be taken at UIC. A second bachelor’s degree is not permitted when there is substantial course overlap between the first and second degrees.

**Minors**

Although a minor is not required, a student may elect to complete one or more minors. BSPS students may complete a minor in another college, with the approval of that college. Discussion about the possibility of a minor fitting into a student’s BSPS program should start with the BSPS program.

**Graduate-Level Courses for Undergraduate Credit**

With approval from the Assistant Dean for Undergraduate Education and permission from the professor, an undergraduate student may enroll in a course at the graduate level (400 or 500 level) for undergraduate credit. Prior to enrollment, students must obtain approval and must have met course prerequisites.

Students should understand that graduate-level courses taken by an undergraduate student are generally not applicable toward a graduate degree.

**Petition Procedure**

Students may file a written petition with their individual department to request an exception to college policies. It is the student’s responsibility to provide documentation in support of a petition. To be eligible for consideration a petition must address an academic term within the last two years. Submission of a petition does not imply approval.

**Registration Approval**

All new students are required to either receive advising or attend an orientation program prior to registration.

**Repeat Policy for Standard Graded Courses**

Students may repeat a course to increase their knowledge of the subject matter. There are circumstances under which repeating a course is advisable and to a student’s advantage. There are also circumstances where repeating a course may disadvantage a student and narrow a student’s options. Some colleges require students to discuss any plan to repeat a course with their academic advisor before they register to repeat the course.

Courses with A or B grades may not be repeated. Normally, courses with a C grade may not be repeated. Courses with D or F grades may be
repeated once without written permission. In all cases, the original grade for the course and the grade for each repeat will appear on the transcript. Only one registration for the course counts toward the total number of credits required for graduation. A course cannot be repeated after receiving credit in a course for which the repeat course is a prerequisite.

To repeat a course more than once requires written permission from the student’s college dean. Students who have been dismissed may not appeal on the grounds of intention to repeat courses. Certain courses may not be repeated; students should consult their college before repeating a course.

**Undergraduate Grade Point Average Recalculation Policy**

- Colleges may elect to implement this policy as early as the end of the junior year, or as late as the final semester during degree certification.
- The college will evaluate each student unable to graduate because of an academic grade point average deficit. The deficit may occur in the UIC GPA, the program GPA, or both.
- The academic record is examined so as to determine if courses, deemed appropriate by each college, with grades of F or grades of D, may be excluded from the student’s grade point average.
- A total of four courses may be excluded, with one course excluded at a time until the necessary quality points are obtained to meet the UIC GPA requirement and/or degree program minimum GPA. The semester hours associated with excluded course grades will not count towards graduation requirements.
- Only the college can initiate course exclusions, and only in consultation with the evaluated student.
- Students may not request exclusions.
- Only courses taken at UIC may be converted as part of this policy.
- This policy only applies to undergraduate degree seeking students.
- All courses taken and all grades will remain on the official transcript.
- The grade exclusion policy does not apply to courses failed as the result of a student conduct hearing.
- In cases where these procedures would impact program accreditation, licensure or similar, colleges may use their discretion to allow the policy. Colleges, departments, and programs may have discretion in choosing courses that impact the student’s major.

**Academic Honors College Honors**

The student who has demonstrated outstanding academic excellence throughout the entire undergraduate program may be eligible for graduation with Latin Honors (e.g. Summa Cum Laude, Magna Cum Laude, and Cum Laude). College Honors will be awarded at the time of graduation to those students who have earned a UIC and cumulative GPA of at least 3.50/4.00.

**Dean’s List**

Each semester the Dean’s List honors the academic excellence of students enrolled in the college’s undergraduate programs. Students must be full time and earn at least 12 semester hours of letter grades in his or her respective department to be eligible. Students must also earn a semester grade point average of 3.50/4.00 or higher.

**Degree Programs**

- **BS in Pharmaceutical Sciences**
- **Doctor of Pharmacy**

**PHAR 200. Introduction to Pharmaceutical Sciences. 3 hours.**
Introduces students to pharmaceutical sciences focusing on the process of drug discovery and development and different aspects of basic and applied sciences. Course Information:

**PHAR 201. Pharmaceutical Care in the US. 3 hours.**
Examines the role of pharmacies/pharmacists in U.S. healthcare, the relationship between pharmacy and society, including challenges to pharmacy equity in rural and urban communities and the opioid crisis, and efforts to reduce healthcare inequities. Course Information: Extensive computer use required. Hybrid course that integrates online and face-to-face classroom activities. US Society course.

**PHAR 385. Remediation. 2-5 hours.**
A remediation option for students who previously failed courses that are no longer taught in the PharmD curriculum. Course content will mirror content from the core course that the student failed. Course Information: May be repeated to a maximum of 15 hours.

**PHAR 410. Integrated Physiology. 3 hours.**
Reviews and integrates principles introduced in pre-requisite physiology, anatomy and biochemistry courses to human non-pathological and pathological situations. Active learning will promote problem-solving skills. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

**PHAR 411. Introduction Pharmacy Practice. 4 hours.**
Students will be introduced to the practice of pharmacy through a combination of lectures, on-campus introductory pharmacy practice experience (IPPE) simulations, and a week-long shadow experience (off-site) in a pharmacy practice setting. Course Information: Prerequisite(s): Current Illinois Pharmacy Technician License and completed college background check and drug screen and immunization records on file with the college. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory-Discussion and one Clinical Practice.

**Transferring**

**Intercollege Transfer Students**
See previous section on Admissions.

**Transfer Students from Other Universities**
See previous section on Admissions.

**Academic Advising**

**Advising Policy**
Prior to admission into the BSPS program, prospective students should contact the College of Pharmacy regarding advice on acceptance of transfer credit. Following admission, students are assigned a BSPS program advisor who will assist them with course and career planning.

**Academic Honors**

**College Honors**

The student who has demonstrated outstanding academic excellence throughout the entire undergraduate program may be eligible for graduation with Latin Honors (e.g. Summa Cum Laude, Magna Cum Laude, and Cum Laude). College Honors will be awarded at the time of graduation to those students who have earned a UIC and cumulative GPA of at least 3.50/4.00.

**Dean’s List**

Each semester the Dean’s List honors the academic excellence of students enrolled in the college’s undergraduate programs. Students must be full time and earn at least 12 semester hours of letter grades in his or her respective department to be eligible. Students must also earn a semester grade point average of 3.50/4.00 or higher.

**Degree Programs**

- **BS in Pharmaceutical Sciences**
- **Doctor of Pharmacy**

**PHAR 200. Introduction to Pharmaceutical Sciences. 3 hours.**
Introduces students to pharmaceutical sciences focusing on the process of drug discovery and development and different aspects of basic and applied sciences. Course Information:

**PHAR 201. Pharmaceutical Care in the US. 3 hours.**
Examines the role of pharmacies/pharmacists in U.S. healthcare, the relationship between pharmacy and society, including challenges to pharmacy equity in rural and urban communities and the opioid crisis, and efforts to reduce healthcare inequities. Course Information: Extensive computer use required. Hybrid course that integrates online and face-to-face classroom activities. US Society course.

**PHAR 385. Remediation. 2-5 hours.**
A remediation option for students who previously failed courses that are no longer taught in the PharmD curriculum. Course content will mirror content from the core course that the student failed. Course Information: May be repeated to a maximum of 15 hours.

**PHAR 410. Integrated Physiology. 3 hours.**
Reviews and integrates principles introduced in pre-requisite physiology, anatomy and biochemistry courses to human non-pathological and pathological situations. Active learning will promote problem-solving skills. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

**PHAR 411. Introduction Pharmacy Practice. 4 hours.**
Students will be introduced to the practice of pharmacy through a combination of lectures, on-campus introductory pharmacy practice experience (IPPE) simulations, and a week-long shadow experience (off-site) in a pharmacy practice setting. Course Information: Prerequisite(s): Current Illinois Pharmacy Technician License and completed college background check and drug screen and immunization records on file with the college. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Laboratory-Discussion and one Clinical Practice.
PHAR 412. Introductory Pharmacy Practice (IPPE): Community. 2 hours.
Overview of contemporary pharmacy practice in a community setting. Students will spend the majority of their time off-site at a community pharmacy enabling them to observe and develop the skills necessary in this setting. Course Information: Prerequisite(s): PHAR 411 and PHAR 431 and current Illinois Pharmacy Technician License and must comply with annual college background check and urine drug screen and must have immunization records complete and on file with college and additional site-specific requirements.

PHAR 413. Introductory Pharmacy Practice Experience (IPPE): Hospital. 2 hours.
Students will be provided an overview of contemporary pharmacy practice in a hospital setting. Students will spend most of their time engaged in actual (off-site at a hospital pharmacy) or simulated (on-site) hospital pharmacy practice activities. Course Information: Prerequisite(s): PHAR 411 and PHAR 431 and current Illinois Pharmacy Technician License and must comply with annual college background check and urine drug screen and must have immunization records complete and on file with college and additional site-specific requirements.

PHAR 414. Introductory Pharmacy Practice (IPPE): Introduction to Patient Care. 2 hours.
Introduction to the skills necessary to provide direct patient care. The goal of this course is to develop the skills necessary for communication of a pharmacotherapeutic recommendation both verbally and in writing. Course Information: Prerequisite(s): PHAR 412 and PHAR 413 and current Illinois Pharmacy Technician License and annual college background check and urine drug screen and immunization records complete and on file with college.

PHAR 422. Fundamentals of Drug Action. 4 hours.
Comprehensive course in chemical mechanisms of drug action. The major objective is for students to develop an understanding of the connection between the properties of chemical compounds and therapeutic action of drugs. Class Schedule Information: To be properly registered, students must enroll in one Lecture and one Discussion.

PHAR 423. Biomedical Chemistry. 4 hours.
Provides a strong foundation in clinical and medical biochemistry. Medicinal chemistry applications in clinical enzymology and medical biochemistry, biochemical signal transduction, and selected special topics will be covered. Course Information: Prerequisite(s): PHAR 422.

PHAR 431. Pharmaceutics I - Pharmaceutics Principles, Drug Delivery Systems, and Calculations. 3 hours.
Content will initially focus on basic pharmaceutics principles applicable to all drug delivery systems. Solution products including sterile product solutions will also be addressed. Students will also learn and practice basic pharmacy calculations. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

PHAR 432. Pharmaceutics II – Pharmaceutical Dosage Forms and Calculations. 2 hours.
Content will focus on dosage form design of sterile and non-sterile products, vaccines, etc.). Pharmacy calculations relevant to dosage form preparation will also be taught. Course Information: Prerequisite(s): PHAR 432.

PHAR 433. Pharmaceutics III – Complex Dosage Forms and Calculations. 2 hours.
Content will focus on basic pharmaceutics principles applicable to complex dosage forms (e.g., sterile products, extended release products, vaccines, etc.). Pharmacy calculations relevant to dosage form preparation will also be taught. Course Information: Prerequisite(s): PHAR 432.

Content will focus on dosage form design of sterile and non-sterile dosage forms; compounding; quality control; pharmacist’s role in preparation, compounding, and dispensing of dosage forms; and pharmacy calculations, including a competency exam. Course Information: Prerequisite(s): PHAR 433.

PHAR 435. Pharmacokinetics. 3 hours.
Students will be introduced to basic principles of pharmacokinetics (e.g., absorption, distribution, biotransformation, excretion), factors influencing these parameters, and the use of common mathematical equations to calculate these parameters. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Laboratory-Discussion.

PHAR 438. Introduction to Drug Information. 1 hour.
Content will focus on comparing and contrasting primary, secondary, and tertiary resources, including their relative value and trustworthiness. Students will gain skills necessary to conduct systematic searches and extract information from appropriate sources.

PHAR 439. Pharmacoepidemiology and Biostatistical Reasoning. 1 hour.
The principles of biostatistics and epidemiology relevant to pharmacy practice and pharmacoepidemiology (e.g., probability, descriptive and inferential statistics, measures of association and causality, and measures of excess risk) will be reviewed.

PHAR 440. Evidence-Based Medicine. 2 hours.
Focuses on the evaluation of clinical research in the literature and its application to patient care decisions. Application and interpretation of statistical methods will be reviewed in the context of study designs. Course Information: Prerequisite(s): PHAR 438. Corequisites: Requires concurrent registration in PHAR 439.

PHAR 461. Pharmacy and the U.S. Healthcare System. 2 hours.
Introduction to the philosophy and mission of the pharmacy profession, the evolution of practice, and elements of the U.S. Healthcare System.

PHAR 462. Social and Behavioral Pharmacy. 2 hours.
Emphasizes the broader social and health systems-related issues that surround and affect patient care provided by pharmacists, nature of disease, illness and self-identity, patient, behavior change, physician prescribing.

PHAR 463. Personal and Professional Development. 2 hours.
Imparts knowledge, skills, abilities, behaviors and attitudes necessary for personal and professional competence and development, reinforcing the concepts of self-awareness, leadership, innovation, entrepreneurship, and professionalism. Course Information: Prerequisite(s): PHAR 461.

PHAR 464. Patient Safety. 1 hour.
Reviews topics related to patient safety. Prevalence and risk factors for error in healthcare settings, systematic approaches to risk assessment and error investigation, and methods to improve health system safety will be covered.
PHAR 465. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 1. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only.

PHAR 466. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 2. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only.

PHAR 467. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 3. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 465 and PHAR 466.

PHAR 468. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 4. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 465 and PHAR 466.

PHAR 469. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 5. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 467 and PHAR 468.

PHAR 470. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 6. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 467 and PHAR 468.

PHAR 471. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 7. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 469 and PHAR 470.

PHAR 472. Pharmacy Learning, Advising, Mentoring, and Engagement for Students (PhLAMES) 8. 0 hours.
Supports and advances the longitudinal professional and character development of students utilizing network-based mentoring and co-curricular activities that complement the didactic and experiential coursework of the professional PharmD curriculum. Course Information: Satisfactory/Unsatisfactory grading only. Prerequisite(s): PHAR 469 and PHAR 470.