ACADEMIC CATALOG
2019-2020

Published by St. Louis College of Pharmacy, June 2019.

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Current and prospective students are responsible for reviewing the Academic Catalog. In the event of any conflict between the policies and information contained in the Academic Catalog and any other documents or written or verbal statements or interpretations, the terms of the Academic Catalog, as interpreted by the President or the Board of Trustees, shall be controlling.

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DISCLAIMER

The academic catalog represents all courses and requirements in effect at the time of its publication. It includes course descriptions, graduation requirements, College policies and detailed information about each program offered at St. Louis College of Pharmacy. Changes in course descriptions, faculty and Board of Trustees after catalog publication will be reflected on the College website.

NOTICE OF CHANGES

St. Louis College of Pharmacy reserves the right to change, modify, add to or delete any of the content, policies or requirements set forth in this Academic Catalog without advance notice at any time unless otherwise provided by the College.

Aug. 1, 2019
The Academic Catalog was updated to reflect policy changes regarding auditing courses (P. 39) and a change in course requirements for the Bachelor of Science in Biomedical Sciences (P. 57) and the Bachelor of Arts in Medical Humanities (P.58).

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ABOUT THE COLLEGE

OUR MISSION

St. Louis College of Pharmacy provides an inclusive, supportive and enriching environment for growth, learning and leadership to prepare our students, residents, faculty, staff and alumni to positively impact patients and society.

OUR VISION

St. Louis College of Pharmacy will be a globally prominent leader in pharmacy and health care education, interprofessional, patient-centered care and collaborative research.

VALUES

- Diversity
- Growth
- Inclusion
- Integrity
- Positivity
- Professionalism
- Respect

HISTORY

Founded in 1864, St. Louis College of Pharmacy is one of the oldest and largest colleges of pharmacy in the nation. The College has a rich history as an independent institution that continues to lead pharmacy and health care education. Undergraduate degrees prepare students for health professions careers and also serve as the foundation for graduate or professional study. The College's Doctor of Pharmacy program prepares students to be leaders and innovators in the profession of pharmacy. Surrounded by one of the nation's preeminent biomedical complexes, the College provides exceptional education, research and practice opportunities for students to best prepare them for a dynamic career in health care. The College offers a full student-life experience, including more than 60 student organizations and NAIA athletics. The student body includes nearly 1,200 students representing 32 states and 26 countries.

The College's more than 7,900 living alumni reside and practice in 49 states and 14 different countries, providing a strong network that assists students with their goals. In the St. Louis region, nearly three out of four practicing pharmacists are graduates of the College.

The College is located on nine acres within the Washington University Medical Campus. Our location allows us to actively forge partnerships with nearby institutions such as Washington University School of Medicine in St. Louis, Saint Louis University and Goldfarb School of Nursing at Barnes-Jewish College.

The academic program incorporates coursework across a wide variety of subjects. This combination of liberal arts and sciences with professional coursework serves to educate the "whole professional" and prepares graduates to be practice- and team-ready. The College offers several bachelor programs to its students.

- Bachelor of Arts (B.A.) in Global Health
- Bachelor of Arts (B.A.) in Medical Humanities with an emphasis in Health Care Communication or Interdisciplinary Studies
- Bachelor of Science (B.S.) in Biomedical Sciences
- Bachelor of Science (B.S.) in Pharmaceutical Chemistry
- Bachelor of Science (B.S.) in Pharmaceutical Sciences with an emphasis in Health Humanities or Health Sciences

A four-year Doctor of Pharmacy program prepares students for practice and leadership in settings ranging from community pharmacies to biomedical research facilities.

Through partnerships with neighboring institutions, the College also provides a pathway for students to complete graduate and professional study in a variety of health care fields.

- Integrated Pharm.D. and MBA offered in partnership with University of Missouri-St. Louis
- Integrated "3+2" bachelor's degree and Master of Science (M.S.) in Occupational Therapy, offered in partnership with Washington University School of Medicine in St. Louis

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- Integrated "3+3" bachelor's degree and Clinical Doctorate of Occupational Therapy (OTD), offered in partnership with Washington University School of Medicine in St. Louis
- Doctor of Physical Therapy (DPT) through a "4+3" pathway with three spaces reserved each year, offered in partnership with Washington University School of Medicine in St. Louis
- Bachelor of Science (B.S.) in Nursing, offered in partnership with Goldfarb School of Nursing at Barnes-Jewish College through a dual admission "2+2" or "4+1" pathway

In 2014, the College began transforming its campus to better fit the needs of students, faculty and staff. In summer 2015, a six-story, 213,000-square-foot Academic and Research Building (ARB) was completed, followed by the seven-story, 193,000-square-foot Recreation and Student Center, which was completed in summer 2017.

SCHOOLS

School of Arts and Sciences

The School of Arts and Sciences oversees Bachelor of Arts and Bachelor of Sciences undergraduate programs. This school is housed in Jones Hall. Faculty in the School of Arts and Sciences have offices located on the second, fourth and fifth floors.

Kimberly Kilgore, Ph.D., is the dean of the School of Arts and Sciences, which includes the Department of Liberal Arts and the Department of Basic Sciences.

School of Pharmacy

The School of Pharmacy oversees the professional program which is four academic years in length. This school is housed in the Academic and Research Building. Faculty in the School of Pharmacy have offices located on the third, fourth and sixth floors.

Bruce Canaday, Pharm.D., is the dean of the School of Pharmacy, which includes the Department of Pharmaceutical and Administrative Sciences, Department of Pharmacy Practice, Office of Postgraduate Education and Office of Experiential Education.

ACCREDITATION

St. Louis College of Pharmacy's Bachelor of Arts (B.A.), Bachelor of Science (B.S.) and Doctor of Pharmacy (Pharm.D.) is accredited by the Higher Learning Commission. The Pharm.D. is also accredited by the Accreditation Council for Pharmacy Education.

Accreditation Council for Pharmacy Education
190 S. LaSalle St., Suite 2850
Chicago, IL 60603-3410
Phone: 312.664.3575
Fax: 866.228.2631
acpe-accredit.org/

The Higher Learning Commission
230 S. LaSalle St., Suite 7-500
Chicago, IL 60604-1413
Phone: 312.263.0456
Fax: 312.263.7462
hlcomission.org/

STUDENT CONSUMER INFORMATION

Consumer information (e.g., graduation rates, student demographic information, financial aid programs and campus crime statistics) is located on the College's public website at **stlcop.edu/policies/student-consumer-information.html**.

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CAMPUS

LOCATION AND FACILITIES

The nine-acre campus is located in the heart of St. Louis' Central West End with Barnes-Jewish Hospital, St. Louis Children's Hospital, Washington University School of Medicine in St. Louis and Goldfarb School of Nursing at Barnes-Jewish College.

- Jones Hall is home to classrooms, laboratories and administrative offices including the Office of the President, School of Arts and Sciences, and Technical Support Center.
- North Residence Hall provides freshman- and sophomore-level students with comfortable on-campus living options, located on the fifth through seventh floors of the new Recreation and Student Center. The Residence Hall is card access only and each room includes basic cable, Wi-Fi and comes fully furnished with an extra-long twin bed, desk, dresser and closet for each resident.
- South Residence Hall provides upper-level students with flexible, apartment-style living, with options to live independently or with roommates. South Residence Hall also houses the Business Office and Office of Advancement on the first floor, as well as a Chick-fil-A and Starbucks.
- The Academic and Research Building features research and clinical skills laboratories, technologically advanced classrooms, the library, flexible gathering space and the auditorium, as well as administrative and faculty offices including the School of Pharmacy, Office of Admissions, Office of Financial Aid and Office of the Registrar.
- The Recreation and Student Center, which opened in fall 2017, is a seven-story, 193,000-square-foot building that includes North Residence Hall, dining and recreation facilities, a fitness center, gymnasiums, the Multicultural Center, the Student Success Center and administrative offices including Office of Student Affairs and Office of Diversity and Inclusion.

LIVING ON CAMPUS

Occupancy in College-owned or operated residence halls is required for all students during the fall and spring semesters of their freshman, sophomore and junior years. Living on campus is a significant aspect of the St. Louis College of Pharmacy educational experience. Recent studies show that students who live on campus are more likely to:

- Have a higher grade point average
- Express greater satisfaction with their undergraduate educational experience and receive more academic and emotional support from other students
- Personally know and spend time outside of class with faculty members
- Graduate on time

Because of the greater likelihood of student academic and personal success, the housing requirement is strictly enforced. St. Louis College of Pharmacy is committed to its students and seeing them persevere and succeed.

Any student requiring an exception must submit a formal letter of appeal outlining their reasoning to the coordinator of residential life. No exceptions will be made unless the request is made in writing. Waivers will only be granted on a case by case basis and cases of extenuating circumstances. A student who has not received a written waiver will continue to bear full financial responsibility in accordance with the annual room and board fee schedule published by the College.

Living in our residence halls provides students opportunities to relax, study and socialize without commuting to and from campus. Upper-level students serving as resident assistants (RAs) in North Residence Hall and community liaisons (CLs) in South Residence Hall live on site to help students transition seamlessly to the College, answer questions and offer advice. A full-time residence hall coordinator also lives on site and is always available to assist students.

Freshman- and sophomore-level students reside in the 220-bed North Residence Hall. North Residence Hall is located on the fifth through seventh floors of the Recreation and Student Center and is accessible by card access. The North Residence Hall bedrooms are double occupancy rooms shared by two people. Bathrooms join two rooms and are shared by four people.

Upper-level students reside in South Residence Hall. South Residence Hall offers single and double occupancy rooms as well as suites that include four single-occupancy bedrooms that are connected by a living room. A limited number of upgraded suites with kitchenettes are also available, which include two sofas, two chairs, two end tables and an entertainment center.

North and South Residence Hall amenities include:

- Common area for relaxing and socializing
- Study lounge
- Community kitchenette
- Laundry facilities
- Vending machines
- Mailroom
- Optional data-line phone with voicemail
- 24/7 security

Meal Plans

North Residence Hall residents must purchase a minimum point package for meals that provides 17 balanced meals per week. South Residence Hall residents must purchase a minimum point package for meals that provides 10 balanced meals per week. Additional points may be purchased, but unused points will not carry over to the next school year. To apply, students must submit an online housing security deposit of $250.

PARKING

The St. Louis College of Pharmacy Parking and Traffic Regulations have been designed to facilitate the safe and orderly flow of traffic, provide maximum use of parking areas, facilitate access for emergency vehicles and promote pedestrian, cyclist and vehicular safety.

The College offers two garage options for student parking. The Duncan Central Garage is located across from campus on the eastside of Taylor Avenue, and the Children's Place Garage is located on the College's campus on Children's Place.

For more information, visit **stlcop.edu/parking/**.

CAMPUS SECURITY REPORT AVAILABILITY

In compliance with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act (Clery Act) and the Higher Education Opportunity Act of 2008, the College publishes an annual security report (ASR) which contains the preceding three calendar years of crime and fire statistics. These reports also contain the College's campus safety and security related policies such as, but not limited to, crime reporting, campus security and access, law enforcement authority, incidents of alcohol and drug use, and the prevention of and response to sexual assault, domestic or dating violence, and stalking.

For the most up to date information, visit **stlcop.edu/safety/clery/**.

Specific questions about the College's Clery Act policies and procedures should be directed to:

Scott Patterson, Director of Public Safety
314.446.8382
scott.patterson@stlcop.edu
Jones Hall, Room 1372

All community members, students, faculty, staff and guests are encouraged to report all crimes and public safety related incidents to public safety in a timely manner at **SAFE (ext.7233)** or, for outside the College, call **314.446.SAFE (7233)**. Dial 911 for off-campus emergencies.

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ACADEMIC CALENDAR 2019-2020

*This calendar is subject to change at the President's or Dean's discretion.

2019 Fall Semester

August 19, Monday
Move-In Day

August 20-23, Tuesday-Friday
Orientation

August 26, Monday
Classes Begin

September 2, Monday
Labor Day – No Classes

September 6, Friday
White Coat Ceremony

September 9, Monday
Last day to Add/Drop

October 14-15, Monday and Tuesday
Fall Break – No Classes

November 8, Friday
Last day to Withdraw

November 27-29, Wednesday-Friday
Thanksgiving Break – No Classes

December 2-6, Monday-Friday
Lab Examinations Only

December 6, Friday
Last Day of Classes

December 9-10, Monday-Tuesday
Final Examination Study Days

December 12-13 and 16-18
Final Examinations

December 24-January 1
Winter Break – College Closed

2019 Spring Semester

January 7-10, Tuesday-Friday
Professional Interviews

January 13, Monday
Classes Begin

January 20, Monday
Dr. Martin Luther King, Jr. Day – No Classes

January 27, Monday
Last day to Add/Drop

March 16-20, Monday-Friday
Spring Break – No Classes

March 25, Wednesday
Tentative Outreach and Advocacy Day

March 27, Friday
Last Day to Withdraw

April 20-24, Monday-Friday
Lab Final Examinations Only

April 24, Friday
Last Day of Classes

April 27-29, Monday-Wednesday
Final Examination Study Days

April 30-May 1 and May 4-6
Final Examinations

May 9, Saturday, 2 p.m.
Commencement

2020 Summer

May 26, Tuesday-June 26, Friday
Summer Session I

June 29, Monday-July 31, Friday
Summer Session II

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ADMISSIONS

APPLICATION FOR ADMISSION

All students applying for admission to St. Louis College of Pharmacy must submit a completed application for admission and all supporting documents to be considered. The Admissions Office reviews applications holistically for admission. The College admits at three entry points:

1. Freshman
2. Undergraduate transfer
3. Professional Year 1 (P1)

Undergraduate applications may be found online at **stlcop.edu/admissions** or through the Common Application site at **commonapp.org**. Paper applications are available by request from the Office of Admissions at admissions@stlcop.edu. Professional students should apply at **pharmcas.org**. There is a $55 nonrefundable application fee.

ADMISSION DECISIONS

Students applying to the College may receive one of the following decisions: Waitlist, Acceptance, Conditional Acceptance, Denial or Deferral. Students may request to have their term or year of entry changed for their application before the tenth day of the semester in which their application is active. The Office of Admissions may request additional information, which may include a personal statement or interview, from the applicant in support of the holistic review process for the Admissions Committee. Failure to submit requested items may impact the decision.

Students seeking to participate in the cooperative agreement program between St. Louis College of Pharmacy (the College) and Goldfarb School of Nursing at Barnes-Jewish College will have their St. Louis College of Pharmacy application reviewed by both institutions for an admission decision to the College for dual-admission.

Waitlist

Students who do not submit an enrollment deposit prior to the May 1 deadline, for the fall term, may be placed on the waitlist for the incoming fall semester.

Acceptance

Students who are accepted to the College have a spot in the respective incoming fall class until May 1. In order to accept this seat in the class, students must submit an enrollment deposit no later than May 1. After May 1, enrollment deposits will be accepted on a space available basis. Students seeking entry for a spring term must submit an enrollment deposit by January 11 before the start of the spring term.

Conditional Acceptance

Students who are conditionally accepted will be required to satisfy conditions prior to or concurrently with the entering semester. Conditions are determined on an individual, case-by-case basis. Students may or may not have the same conditions as another student. Conditions must be successfully completed. The College reserves the right to rescind a conditional offer of acceptance at any time.

Denial

Students who are denied admission to the College will not be permitted to begin enrollment for the semester. Unless otherwise stated, students who have been denied will be eligible to reapply to the College as early as the next entry term.

College-Initiated Deferral

Students who are not selected during the Early Action application period or Early Decision period may be deferred to the Regular Decision application period. This deferral allows applicants the opportunity to submit additional documents to make their application more competitive. A deferral should not be seen as a penalty against an applicant. Instead, this is to afford an opportunity to the Admissions Committee to see a better picture of an applicant.

Student Deferral of Admission

Students who receive an offer of admission will not be guaranteed a spot at any other entry point at the College. Applications and documents will be held for one year from the application term. A student may defer an offer of admission by the tenth day of the semester in which the admissions offer was extended. Original application materials will be considered for a new application. However, additional application materials, such as transcripts from additional coursework, may be requested for courses completed since the original application, for consideration for admission.

Rescinding an Offer of Admission

All offers of admission are contingent upon submitting all final documentation related to the admission process. Students admitted prior to completing academic coursework in high school or college will be subject to a final transcript review. The College reserves the right to rescind an offer of admission after review of these documents. Offers of admission may be rescinded for academic performance, disciplinary issues, falsification of application information, or failure to meet additional conditions set forth by the Office of Admissions and the Admissions Committee. Once an offer of admission is rescinded, the student may apply to the College at the next term or entry point.

Appealing Admission Decision

Students who have received a conditional offer of admission or have been denied may appeal one time. Appeals will be taken in writing and must be submitted to the Office of Admissions within 10 days of decision. All admission denials will be final after May 1 and no appeals will be reviewed. Appeals must be formally written and submitted to the Admissions Committee through the Director of Admissions, in-person appeals will only be initiated by a request from the Admissions Committee. Admission offers that have been rescinded will not be eligible to appeal, but students will have the opportunity to apply for the next term unless otherwise noted.

INTERNATIONAL ADMISSION

A United States Immigration and Customs Enforcement (ICE) I-20 Form will not be issued for entry into the U.S. or transfer from another American institution until the applicant has fully satisfied all admission criteria and has been approved for acceptance.

The College reserves the right to require placement exams in math or science, additional verification of English proficiency and an interview. The applicant will be notified if any of the above information is deemed necessary along with scheduled dates and times for testing or an interview.

To be considered for acceptance, all international applicants must submit the following documents in addition to all admissions documents required of U.S. citizens for admission.

- Application requirements for freshmen, transfer or professional students.
- Evidence of English proficiency by submitting a minimum score of 550 (paper based test) or 80 (internet based test) from the Test of English as a Foreign Language (TOEFL) — the St. Louis College of Pharmacy TOEFL code is 6626. The International English Language Testing System (IELTS) score of 6.5 or higher is acceptable.
- Official academic records (secondary or college) with official credit evaluation by a credential evaluation service associated with the Association of International Credential Evaluators (AICE) or the National Association of Credential Evaluation Services (NACES). Education Credentials Evaluators (ECE) or World Education Services (WES) is strongly recommended but not required.
- Proof of financial support while attending St. Louis College of Pharmacy. The following documents must be submitted to complete the application:
  - A recent bank statement in the applicant's name showing deposited funds translated into U.S. currency.
  - A notarized affidavit of support from a sponsor defining the exact amount of funds designated for the student's educational and living expenses while at the College and the period of time for which financial support is pledged (the full name, address and phone number of the sponsor is required).

If currently in the United States, a copy of the student's status with the U.S. Citizenship and Immigration Service (USCIS) (i.e., I-20, I-94 and Visa). Visa transfer forms, including an I-20 transfer form will be required and can be found on the website at **stlcop.edu/admissions/applying/forms.html**.

NATIONAL ASSOCIATION FOR COLLEGE ADMISSION COUNSELING

St. Louis College of Pharmacy is a member of the National Association for College Admission Counseling (NACAC) and endorses the principles contained in the NACAC Statement of Principles of Good Practice.

UNDERGRADUATE ADMISSIONS

Application Deadlines

- December 1: Early Action and Early Decision deadline for incoming freshman only for the following fall semester
- March 1: Regular Decision deadline for all levels; Freshman, Undergraduate Transfer and P1
- December 1: Financial Aid priority deadline
- January 11: Deposit deadline for Spring semester entrance for Freshman and Undergrad Transfer
- May 1: Deposit deadline, deadline for refunded deposit

Freshman Admission

Students applying for entry into the freshman year have the option to submit an application by three different deadlines.

- Early Action
- Early Decision
- Regular Decision

A freshman applicant is defined as a student who has graduated high school and has not attempted any college coursework beyond the summer following graduation. College coursework completed to fulfill high school graduation requirements prior to graduation does not exempt a student from applying as a freshman applicant.

International students must submit requirements for admission in addition to specific documentation noted in the "International Admissions" section.

Early Action
The deadline to apply for entry into the freshman year for fall under Early Action is December 1. Students applying for Early Action must submit a completed application and supporting documentation to receive full consideration for admission. A limited number of seats and acceptances will be granted during the Early Action period.

Students applying for Early Action are only required to submit the following items for admission review. We encourage students who have a strong academic record, especially in mathematics and science, to apply during this period. Students who do not receive an Early Action acceptance will automatically be deferred to Regular Decision. Applications moved to Regular Decision will be asked to submit the requirements for application of Regular Decision.

The following items are required for the Early Action deadline:

- Completed application for admission submitted online at **stlcop.edu/apply**, through the Common Application or by paper application
- $55 nonrefundable application fee
- Official high school transcript that includes all work through at least the 11th grade
- Official ACT or SAT scores
- (Recommended) a list of current courses and projected spring semester courses.

Early Decision
The deadline to apply for entry into the freshman year for fall as Early Decision is December 1. Students applying for Early Decision must submit a completed application and supporting documents to receive full consideration for admission. A limited number of seats and acceptances will be granted during the Early Decision period.

Students applying for Early Decision are not encouraged to submit application under any other Early Decision

Agreement. Doing so may make an applicant ineligible for admission under the Early Decision Agreement and would subsequently be moved to Regular Decision. Students admitted under the Early Decision Agreement agree to withdraw all applications to other institutions and submit their Intent to Enroll Form.

The following items are required for the Early Decision deadline:

- Completed application for admission submitted online at **stlcop.edu/apply**, through the Common Application or by paper application
- $55 nonrefundable application fee
- Official high school transcript that includes all work through at least the 11th grade
- Official ACT or SAT scores
- One character and general academic recommendation letter from your school counselor
- One science recommendation letter from a science teacher, preferably chemistry or biology
- One mathematics recommendation letter from a math teacher, preferably current or last year
- A mid-year report for current courses and a list of recommended spring semester coursework
- Early Decision agreement form
- 500-word responsive essay (response questions determined yearly) (optional)

If a student who applies for financial aid is not offered a package that makes attendance possible, the student may be released from the Early Decision Agreement. A financial aid package may consist of all or some of the following: scholarships, grants, Federal Work-Study and loans, as reflected on an official student aid report determined by the results of the Free Application for Federal Student Aid (FAFSA).

Regular Decision

The deadline to apply for entry into the freshman year for fall as Regular Decision is March 1. Students applying for Regular Decision must submit a completed application and supporting documents to receive full consideration for admission. Applications received from exceptional candidates after December 1 may be accelerated through review process. Spring semester application deadline is January 11 and are only accepted by regular decision.

The following items are required for the Regular Decision deadline:

- Completed application for admission submitted online at **stlcop.edu/apply**, through the Common Application or by paper application
- $55 nonrefundable application fee
- Official high school transcript that includes all work through at least the 11th grade
- Submit official ACT or SAT scores
- One general academic reference from your school counselor
- One science reference from a science teacher, preferably chemistry or biology
- One mathematics reference from a math teacher, preferably current or last year
- A mid-year report for current courses and a list of spring semester coursework
- 500-word responsive essay (response questions determined yearly) (optional)

GED

A student who obtains a GED certificate will be considered only after they have completed courses at the college level as an undergraduate transfer student. At that time, students will be required to fulfill the undergraduate transfer requirements for admission and may be asked for an ACT or SAT score.

Home-Schooled

Home-schooled students must submit a transcript of completed secondary-level coursework with a detailed description of each course. Evidence of the successful completion of science lab courses equivalent to courses required in an accredited high school for graduation must also be submitted. Evaluation of courses is on an individual basis, and the decision of the Office of the Registrar is final. Home-schooled students may be required to take math, science or English placement exams. Students may be asked for an ACT or SAT score.

Undergraduate Transfer Admission

Students applying for admission to the College as an undergraduate transfer have the opportunity to enter as a freshman, sophomore or junior, based on credits previously earned and which are applicable at St. Louis College of Pharmacy from a regionally accredited institution. An official evaluation by the Office of the Registrar will determine how many credits will transfer and the remaining course of study while at the College. The deadline for full consideration for undergraduate transfer students is March 1 for the fall term and January 11 for the spring term. Applicants applying after this deadline will be considered on a space available basis.

The following items are required to complete an undergraduate transfer application:

- Completed application for admission submitted online at **stlcop.edu/apply** or by paper application
- $55 nonrefundable application fee
- All official transcripts from any post-secondary institution attended
- One character and general academic recommendation from a supervisor at a job, an academic professional, or anyone outside your family
- One academic recommendation letter from a previous or current science or math teacher
- Students must also be in good standing (no outstanding balances, current academic suspensions, disciplinary suspension, etc.) with all institutions attended prior to St. Louis College of Pharmacy
- 500-word personal statement (optional)

Undergraduate transfer students with the intent to pursue entry into the professional program and who will complete less than three full-time fall or spring semesters at the College will be required to take the Pharmacy College Admission Test (PCAT) prior to entry into the professional program. It is recommended that the PCAT be taken prior to admission to the College, but for students who have not taken the PCAT, conditional admission may be offered requiring that the PCAT be taken prior to the P1 year. A minimum score will be set each year.

Visiting Students

Students attending another collegiate institution or secondary school seeking enrollment for one semester must submit an application for admission. Supplemental materials may be requested such as placement test scores or transcripts to assist with course placement.

The following items are required to complete a visiting student application:

- Completed application for admission submitted online at **stlcop.edu/apply** or by paper application
- $55 nonrefundable application fee
- All official transcripts from any post-secondary institution attended or most current high school transcript
- Students must also be in good standing (no outstanding balances, current academic suspensions, disciplinary suspension, etc.) with all institutions attended prior to St. Louis College of Pharmacy

Transfer Credits

Advanced Placement (AP) Credit
Credit earned in the College Board's Advanced Placement Program is accepted at the College. Students who score a minimum of four are eligible for credit. In addition to credit toward required courses, credit is available for elective courses.

International Baccalaureate (IB) Credit
The College recognizes the International Baccalaureate Program and will grant credit for performance in the program. While no credit is given for the standard-level examinations, credit for students who pass the higher-level examination with a minimum score of six will be awarded. In addition to credit toward required courses, credit is available for elective courses.

Credit awarded by other institutions based on Advanced Placement (AP) or International Baccalaureate (IB) tests and reported on a transcript will not transfer. Official test results must be sent by the College Board or the IB Organization to St. Louis College of Pharmacy for credit consideration.

College Credit
Courses taken outside the College will be transferred in as credit, if approved by the College. The College reserves the right to refuse the transfer of any previously earned college credits. Each applicant's previously completed college-level coursework is evaluated on an individual basis.

Factors that influence the transfer of credits include, but are not limited to, the following:

- It is recommended that prerequisite coursework not be completed more than seven years prior to the Pharm.D. program application.
- Credit will not be awarded for coursework in which less than a C- was earned.

Dual Credit
Credit earned during high school in approved dual-credit courses from an accredited college, university or community college is accepted at the College. Students who receive a minimum of B- are eligible for credit. In addition to credit toward required courses, credit is available for elective courses.

PROFESSIONAL (P1) ADMISSION

To be considered for acceptance, professional transfer applicants must apply to the College using the central pharmacy application system PharmCAS (**pharmcas.org**). Refer to the PharmCAS website or the College website (**stlcop.edu**) for specific requirements. Applications sent directly to the College will be returned to the applicant for submission through the PharmCAS website. To apply to PharmCAS Early Decision, submit all PharmCAS application materials by September 3, 2019. The deadline for applying to PharmCAS is March 1, or until the incoming professional class is full, whichever comes first.

The College reserves the right to limit or eliminate transfer into the first professional year based on the expected student population who will progress from the undergraduate program directly into the first professional year. Current students who are in good academic standing and are eligible to return are given preference for admission in the incoming professional class. Students must also be in good standing (no outstanding balances, current academic suspensions, disciplinary suspension, etc.) with all institutions attended before St. Louis College of Pharmacy.

The College also reserves the right to require proof of English proficiency. The applicant will be notified if this is necessary, along with scheduled dates and times for testing. The applicant will also be required to attend an on-campus interview as part of the application process.

The College requires completion of the Pharmacy College Admissions Test (PCAT) for transfer students (**pcatweb.info**).

Application Deadlines

- September 3: Early Decision deadline for First Professional Year (P1) students applying through PharmCAS.
- January 11: Regular Decision deadline spring term. Freshman and Undergrad Transfer.
- March 1: Regular Decision deadline fall term. All levels, freshman, undergraduate transfer and P1.

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Prerequisites for Entry into the First Professional (P1) Year

COURSE	CREDIT HOURS
General Chemistry (with Lab)	8
Organic Chemistry (with Lab)	8
Biochemistry	3
Biology (with Lab)	8
Human Anatomy and Physiology (with Lab)	8
Microbiology (with Lab)	4
Calculus	3
Introductory Statistics	3
Physics (with Lab)	4
English Composition and College Writing	6
Public Speaking and Communications	3
Social Sciences (must include Psychology and/or Sociology)	6
Microeconomics, Macroeconomics or a Survey of Economics Course	3
General Liberal Arts and Humanities	12
Introduction to Health Care (students transferring into Professional Year 1 of the Pharm.D. program who do not have this course can take this as an elective during Professional Year 1)	2

All prerequisites must be approved by the College. Courses with grades below C- will not be accepted. It is recommended that prerequisite coursework not be completed more than seven years prior to the Pharm.D. program application.

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TUITION AND FEES

The Office of Financial Aid is committed to helping students navigate the financial aid application process and securing the aid necessary to pursue a degree. The Office of Financial Aid can be reached at 314.446.8328.

TUITION

Total tuition, per semester, varies according to the program level.

Tuition and fees for the 2019-2020 academic year are listed below. Contact the Business Office for questions regarding payments and refunds.

LEVEL	PER ACADEMIC YEAR (Fall and Spring)	SUMMER 2019 (Required Courses)	FALL 2019 SEMESTER	SPRING 2020 SEMESTER	PER CREDIT HOUR**
Undergraduate Programs	$28,996		$14,498	$14,498	$967
Professional Program: P1 Year*	$37,153		$18,577	$18,576	$1,161
Professional Program: P2 Year*	$37,153	$3,483*	$18,577	$18,576	$1,161
Professional Program: P3 Year*	$37,153	$3,483*	$18,577	$18,576	$1,161
Professional Program: P4 Year*	$41,797	Tuition assessed per rotation*	Tuition assessed per rotation*	Tuition assessed per rotation*	$1,161

*For all students who begin the professional program fall 2016 and after:

- All introductory pharmacy practice experience courses (IPPE) taken during the summer and winter terms will be billed on a per credit hour basis.
- All advanced pharmacy practice experience courses (APPE) will be billed on a per credit hour basis.

**The individual credit hour rate applies to courses in excess of 18 credit hours, less than 12 credit hours, and summer session courses.

STUDENT FEES

FEE TYPE	PER ACADEMIC YEAR (Fall and Spring)	FALL 2019 SEMESTER	SPRING 2020 SEMESTER
Student Fee	$600	$300	$300
Technology Fee (students with exisiting leases only)	$525	$263	$262
Student Health Insurance (Estimate)	$4,020	$1,675	$2,345

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HOUSING

North Residence Hall (Freshman and Sophomore Students)

ROOM TYPE	PER ACADEMIC YEAR (Fall and Spring)	FALL 2019 SEMESTER	SPRING 2020 SEMESTER
Shared room	$6,663	$3,332	$3,331
Single Room	$9,995	$4,998	$4,997
Freshman and sophomore minimum meal plan*	$5,593	$2,797	$2,796

**Larger meal plans are available.*

South Residence Hall (Junior and Professional Students)

ROOM TYPE	PER ACADEMIC YEAR (Fall and Spring)	FALL 2019 SEMESTER	SPRING 2020 SEMESTER
Suite with Kitchenette	$7,850	$3,925	$3,925
Standard Suite	$7,350	$3,675	$3,675
Single with Kitchenette	$9,995	$4,998	$4,997
Standard Single Room	$9,395	$4,698	$4,697
Standard Double Room	$5,880	$2,940	$2,940
Resident minimum meal plan*	$3,290	$1,645	$1,645

**Larger meal plans are available.*

PARKING

Students may choose parking in the Children's Place Garage or the Duncan Central Garage, one block east of campus, as space allows. Parking rates for the academic school year are as follows:

Annual Pricing (August-May):

- Duncan Central Garage - $1,050/per the 2019-2020 academic school year
- Children's Place Garage - $1,150/per the 2019-2020 academic school year

During the summer semester, parking is available at a weekly rate of $35 in the Children's Place Garage or $25 in the Duncan Avenue Garage.

Students also have the option of evening and weekend parking for $150 per semester.

For more information, **visit stlcop.edu/parking/**.

INSURANCE

Health Insurance

As an institution dedicated to the study of health care, St. Louis College of Pharmacy places a great emphasis on personal health and well-being. The College requires that all students be covered by a comprehensive medical and prescription drug insurance plan. Students will be required to show proof of coverage by a health insurance policy or enroll under the College-sponsored plan through Wellfleet.

It is imperative that students watch for emails during the summer for specific health insurance open enrollment and waiver information. Detailed instructions will also be emailed in July together with the summer tuition statement. Every student has to take action every year to either waive or enroll under the college sponsored plan. Students who will not take appropriate action by showing proof of other coverage before the Aug. 15, 2019 deadline will be submitted for enforced enrollment and billed for the annual student health insurance plan through Wellfleet. This policy cannot be canceled.

- The College's plan will be in effect Aug. 1, 2019 through July 31, 2020.
- A complete summary of the benefits can be found at **https://consolidatedhealthplan.com/group/602/home**.
- The cost estimate for the 2019-2020 school year is $4,020 which will be divided into two-semester payments.
- Financial aid packages can be adjusted to cover this cost.
- Students must take action to enroll or submit a waiver between July 15, 2019 through Aug. 15, 2019.

For more information, contact the Office of Student Affairs, at 314.446.8205.

Professional Liability Insurance

St. Louis College of Pharmacy coordinates domestic and international professional liability insurance coverage for students in their P1–P4 years. The domestic professional liability insurance covers pharmacy practice activities in the United States and certain U.S. territories. This coverage includes the student's private practice activities associated with outside employment or volunteer work and official College courses or activities (e.g. experiential training, sponsored community health events). For students participating in official College courses or practice activities in foreign countries, the College maintains professional liability insurance coverage for any student acting within the scope of their authorized duties. All students and faculty members involved with College sponsored international travel must obtain authorization by following the requirements of the College's International Travel Policy (policy may be found at **policies.stlcop.edu**). Students who engage in unauthorized and non-College sponsored activities are not covered under the College's international professional liability insurance program. The College cautions students against unauthorized overseas pharmacy or health care related activities. This can result in personal liability at home or in a foreign country for violations of professional licensure and registration requirements, ethical standards, and harm caused to third persons. Additionally, unauthorized activity could potentially adversely impact a student's application for state licensure as a pharmacist. Any questions regarding international travel should be directed to the director of the Office of International Programs.

PAYMENT INFORMATION

Enrollment Deposit

Students who apply under the Early Decision plan must submit a $300 nonrefundable deposit. Students who apply under Regular Decision are asked to submit a $300 refundable deposit. All deposits for fall admission are due by May 1 and are refundable until that date. All deposits for spring admission are due by January 11 and are refundable within two weeks of the deposit. All deposits for fall admission made after May 1 are due within two weeks of acceptance and are nonrefundable.

Residence Hall Deposit

Newly accepted students will complete an online housing application following receipt of their academic deposit. The refundable security or damage deposit of $250 must accompany the completed housing application. This deposit will be returned when the room is vacated, provided that no damage has been done to the room and full contract term has been met.

Payments

All housing payments are due at the beginning of each semester. The College reserves the right to cancel the registration of students who have not made adequate payment by the due date. Students with outstanding balances will not be allowed to register for subsequent semesters. Payment of all College fees and obligations is a requirement for graduation. If fees or obligations to the College remain unpaid after the student is graduated or leaves school, the College reserves the right to withhold applications for state board examinations and certified copies of student transcripts, as well as the student's diploma.

Accounts Receivable Policy

The Business Office is responsible for the billing and collection of all tuition and fees owed for each semester. The office is located on the main floor of the South Residence Hall, and the office hours are from 8:30 a.m.-4 p.m., Monday-Friday. Each student attending St. Louis College of Pharmacy assumes responsibility to pay all College-related expenses not covered by financial aid.

Student Billing

Fall billing is made available in early July, with the full payment due two weeks before the semester begins. Spring billing is made available in early December, with the full payment due two weeks before the semester begins. Summer billing is made available in early May, with the full payment due the first day of summer classes. Student bills may be paid by financial aid, personal check, cashier's check, money order, wire transfer or cash. The Business Office accepts credit and debit card payments online only and by automated clearing house online only.

Overdue Bills

A 1% late fee may be charged to accounts five days delinquent. If a student's account is delinquent, the College may take any steps necessary to collect the balance due. This may include preventing a student from registering for classes or withholding transcripts or diplomas.

Students who withdraw from the College must make satisfactory payment arrangements to meet all outstanding financial obligations to the College. Examples of such obligations include tuition and fees, room and board, library fines, bookstore accounts, health-related fees and so on. The College may take any steps necessary to collect the balance due, including turning the account over to a collection agency or taking legal action to collect the balance due. Any costs incurred in collecting a student account – up to 50% of the balance due – will be charged to the student. The student's transcript will not be released until payment of all obligations has been made in full. Each graduating student must pay all financial obligations to the College prior to graduation. A St. Louis College of Pharmacy diploma will not be awarded until this obligation is met.

St. Louis College of Pharmacy Health Professions Loans become due as stated in the promissory note signed by the student. Transcripts will not be released to students who are in default on repayment of these loans.

Late Fees

Late fees are assessed monthly. Unpaid balances will incur late fees in the amount of 1% of the unpaid balance each month.

All College fees including tuition, fees and housing costs are assessed per semester and are payable two weeks before the beginning of each semester.

Note: Tuition, fees, deposits and housing fees are subject to change without notice.

Tuition and Miscellaneous Fee Refunds

The application fee and the student activities fee are not refundable. The following graduated scales are used to determine refunds for students withdrawing from the College.

One hundred percent of tuition minus the tuition deposit will be refunded to first-semester, first-year students and first-semester, transfer students only if written notice of cancellation is received by the appropriate Office of the Dean after May 1 but before the first day of classes.

Tuition refunds for the semester are based on the documented last date of attendance determined by the Office of the Registrar. Title IV financial aid refunds will also be calculated based upon the same last date of attendance. Weeks coincide with the first day of class. For example, weeks that begin on Wednesday would end on Tuesday.

Tuition Refunds
Students who withdraw from all classes will receive a refund based on the following withdrawal schedule:

Withdrawal Date per Refund – Tuition Only

- During first or second weeks of classes – 100%
- During third or fourth weeks of classes – 80%
- During fifth or sixth weeks of classes – 60%
- After sixth week of classes – No refund
- After 20% of summer or winter IPPE roation has been completed – No refund
- After 20% of APPE rotation has been completed – No refund

Federal student aid recipients receive financial aid refunds as determined by the Office of Financial Aid based on Title IV regulations.

Refund for Dropped Courses
All full-time students are assessed tuition at a full-time tuition rate and do not receive refunds for dropped courses.

If individual courses are dropped, only those students who were assessed tuition on a per credit hour basis may receive a refund for the dropped courses. The amount of a refund for a dropped course is determined by the College withdrawal refund schedule.

Refunds are available when a credit balance exists on an account. Any fees owed to the College will be subtracted from the refund. Students are notified by email when their refund is available.

The Title IV aid earned by students withdrawing from the College may not cover all of the unpaid costs charged by the College. In such cases, withdrawn students must pay the balances not covered by earned Title IV aid to the Business Office before their accounts are considered in good standing.

Refund Example
Student A withdraws 13 days into a 110-day semester during the third week of classes. The student completed 12% of the semester and is responsible to pay 20% of the tuition for the semester ($2,740 of $13,700 in tuition and fees). The student earned just 12 percent of his financial aid ($120 of a $1,000 Pell grant disbursement). The remaining, unearned portion of his financial aid ($880) must be returned to the United States Department of Education. Additionally, Student A owes the College $2,620 after his earned Title IV aid is deducted from his charged tuition and fees ($2,740 minus $120).

Return of Title IV Federal Funds
Upon receiving notice of a student's withdrawal dates from the Office of the Registrar, the Office of Financial Aid will calculate the percentage of a period of enrollment completed and the portion of federal funds received that must be returned to the Department of Education. The Office of Financial Aid will share this calculation with the Business Office.

The Business Office will use the form's calculations to determine the number of days completed within the payment period, and the financial aid (including Title IV assistance) that must be removed from the student's account and returned to Title IV. The Business Office will calculate returned, unearned Title IV funds in the following order: Unsubsidized Federal Direct Loan, Subsidized Federal Direct Loan, Federal Direct PLUS Loan, Pell Grant, FSEOG (the College does not award TEACH Grants). Unearned Title IV assistance will be

returned within 45 days of the Office of the Registrar's determination of the student's final date of attendance.

The Business Office will send a final bill to withdrawn students documenting tuition credits and unearned Title IV debits (returns).

For students leaving the College with an outstanding balance owed to the College, all unearned Title IV assistance for the payment period, or an equivalent amount in cases when students received a refund resulting from Title IV assistance, will be returned by the College to the Department of Education. The College will send bills to withdrawn students with outstanding balances monthly for six months. If no payment is received within six months from withdrawn students owing $1,000 or more, the Business Office will send the student's information to a collection agency. If no payment is received within six months from withdrawn students owing less than $1,000, the Business Office forgives the debt, but places a hold against the student's transcript. Transcripts will not be released until the student pays the outstanding balance.

Housing Refunds
North and South Residence Hall contracts are for the entire academic year (two semesters) and can be cancelled only in the event of termination of enrollment or marriage. Fees are assessed on a semester basis.

- Request for cancellation is to be submitted to the Office of Facilities Management.
- The College will give the student a prorated credit or refund applied against the contract charges paid by the student for the contract term, subject to an early cancellation fee equal to $750 plus the deposit. A student who has completed more than 75% of the current academic semester will not receive a credit or refund on their account or be assessed an early cancellation fee for the semester in which the contract cancellation form is received. The College will assess the early cancellation fee ($750 plus the deposit) for any student who has contracted for space and services for additional, unused semesters under the term of their contract. The student agrees that the cost of repairs or replacement for damages to College property or any other amounts due and owing under the contract or College policies may be deducted from any credit or refund or charged to the student.
- If payments are being made under the deferred payment plan and the refundable amount, based on the above schedule, is less than the unpaid balance, the difference is still due to the College. The amount of the refund will be applied to any outstanding obligation due to the College before a refund check is authorized.
- Housing deposits are refundable before enrolling in classes at the College. If a student withdraws after enrolling the deposit may be refunded, minus any costs for damages. Housing deposits are not refunded if a student breaks a housing contract and remains enrolled in the College.

Returned Checks

A $20 fee will be charged on any returned check. After two returned checks, a student may be required to pay by cashier's check, money order, wire transfer or cash.

Overpayments, Fraud and Abuse

The Office of Financial Aid will report to the Office of Inspector General all instances of suspected fraud where a financial aid applicant, employee or other individual has misreported information or altered documentation for the purpose of increasing aid eligibility or fraudulently obtaining federal aid funds.

Professional Judgment

The Office of Financial Aid may make exceptions to the above guidelines for unusual or extenuating circumstances pertaining to the student or parent. Professional judgment applications are available in the Office of Financial Aid. Professional judgment cannot be used to waive general student eligibility requirements or to circumvent the intent of the law or regulations.

Students are responsible for repaying unearned Direct Loan disbursements that were refunded to the student by the College. Students may learn their Direct Loan servicer by completing loan exit counseling at **nslds.ed.gov** as detailed in an exit counseling notice sent within 30 days of withdrawal or by visiting the Office of Financial Aid.

FINANCIAL AID AND ASSISTANCE

FINANCIAL AID CALCULATIONS

Federal and state aid is primarily based upon financial need. Students must apply through the Free Application for Federal Aid (FAFSA) to be considered. This requires disclosures of student and family income, assets, savings, family size and any unusual circumstances affecting family finances.

The Expected Family Contribution (EFC) is calculated, per federal regulations, by the U.S. Department of Education and returned to the student (and the College) in the form of a Student Aid Report (SAR). The cost of attendance (i.e., tuition, room and board, books, supplies, personal items, travel expenses, etc.) minus the EFC, results in the Student's Unmet Need.

(Cost of Attendance) – (Expected Family Contribution) = Student's Unmet Need

Students are encouraged to apply for aid as soon as possible after October 1 for the following academic year.

FINANCIAL ASSISTANCE PACKAGES

Only students pursuing their first undergraduate degree are eligible for federal and state grants. Graduate-level students are not eligible for federal or state grants or scholarships, but they are eligible to benefit from additional resources available through the Federal Direct Loan program.

For federal financial aid eligibility, undergraduate students are considered full-time when enrolled in at least 12 credit hours during fall, spring or summer semesters. Professional students are considered full-time when enrolled in at least eight credit hours during the fall and spring semesters, and when enrolled in at least six credit hours during the summer semester. These enrollment definitions are only used to determine eligibility for federal financial aid.

Federal Pell Grant

(funded by the federal government)

Eligibility is determined by the Expected Family Contribution (EFC) figure on the Student Aid Report (SAR) and the number of credit hours for which the student registers each semester. The student must be pursuing their first undergraduate degree to receive this grant.

Federal Supplemental Educational Opportunity Grant (SEOG)

(federally funded)

Eligibility is determined based upon exceptional need criteria. Preference is given to Pell Grant recipients. The student must be pursuing their first undergraduate degree and registered as at least a half-time student to receive this grant.

Federal Direct Loan

(federally funded)

Subsidized Federal Direct Loan eligibility is determined on the basis of need. The government subsidizes these loans by paying the interest while the student is in school.

Unsubsidized Federal Direct Loan eligibility is determined by the cost of education and available resources. Interest may be accrued or paid, but it is the student's responsibility. The student must be registered at least half-time to be eligible.

Students are eligible to borrow under the Direct Loan Program as follows:

Undergraduate Levels

Freshman
Dependent Eligibility $3,500 Subsidized + $2,000 Unsubsidized
Independent Eligibility $3,500 Subsidized + $6,000 Unsubsidized

Sophomore
Dependent Eligibility $4,500 Subsidized + $2,000 Unsubsidized
Independent Eligibility $4,500 Subsidized + $6,000 Unsubsidized

Junior
Dependent Eligibility $5,500 Subsidized + $2,000 Unsubsidized
Independent Eligibility $5,500 Subsidized + $7,000 Unsubsidized

Senior
Dependent Eligibility $5,500 Subsidized + $2,000 Unsubsidized
Independent Eligibility $5,500 Subsidized + $7,000 Unsubsidized

Graduate Levels

P1-P3
Graduate Eligibility $20,500 Unsubsidized + $12,500 *Additional Unsubsidized

P4
Graduate Eligibility $20,500 Unsubsidized + $16,667 *Additional Unsubsidized

Professional Year 4 disbursements are issued in thirds. Federal regulations require students to attend class (i.e., rotations) when disbursements are made. A disbursement will be delayed if a student has an off-rotation scheduled during the regular disbursement date of an enrollment period.

*Additional unsubsidized Direct Loan eligibility requires full-time enrollment as determined by the Office of the Registrar.

**Additional unsubsidized Direct Loan eligibility of $12,500 is based on a 9-month enrollment period. Students enrolled in additional months will increase their additional unsubsidized eligibility by $1,389 per month.

Undergraduate dependent students can borrow a maximum of $31,000 while independent students can borrow a maximum of $57,500, of which up to $23,000 may be subsidized loans.

Graduate students can borrow a maximum of $224,000 (combined graduate and undergraduate) of which a maximum of $65,500 can be subsidized.

A student is classified as dependent or independent by the Department of Education based on information provided on the FAFSA.

Students reaching graduate levels are not eligible for federal and state grant or scholarship assistance.

Federal Direct Parent and Graduate PLUS Loan

(federally funded)

Parent PLUS loans are originated by parents or stepparents of eligible dependent undergraduate children. Graduate PLUS loans are originated by graduate level students. Eligibility is determined on the basis of the cost of education, available resources and borrower's credit history. Students must be registered at least half-time. Only parents or stepparents of dependent, undergraduate-level students may apply for parent PLUS Loans.

Federal Work-Study

(federally funded)

Eligibility is based on need. Students awarded under this program earn the funds as they work part time. The funds earned, minus taxes, are paid directly to the student.

Access Missouri Grant

(funded by the state of Missouri)

The student must be pursuing their first undergraduate degree, registered as a full-time student, demonstrate need (as determined by the state of Missouri) and reside permanently in Missouri. A cumulative GPA of 2.5 is required to renew this award. Students at St. Louis College of Pharmacy are eligible to receive this grant while enrolled as undergraduate students.

Missouri Higher Education Academic Scholarship (Bright Flight)

(funded by the state of Missouri)

This financial aid is awarded to students with the highest SAT or ACT scores as determined by the state of Missouri. The student must be a resident of Missouri. A cumulative GPA of 2.5 is required to renew this award. The student must be pursuing their first undergraduate degree. Students at St. Louis College of Pharmacy are eligible to receive this grant while enrolled as undergraduate students.

Health Professions Loan
(federally funded)

Eligibility is determined based on exceptional need criteria utilizing the parent and student information. The student must be registered full time in a degree program leading to a Pharm.D. Preference will be given to undergraduate students who have an EFC of less than $7,500. Federal guidelines require recipients to provide copies of student and parent tax transcripts – regardless of age and dependency status. A signed promissory note, self-certification form and acknowledgement of truth in lending statements must be on file before funds will be disbursed. Students are also required to complete an online entrance interview each year they borrow.

Private Loan
(funded by private lenders)

Eligibility criteria and interest rates vary from lender to lender. Private loans must be preapproved by the lender before the College certifies the loan.

Merit Scholarships
(funded by St. Louis College of Pharmacy)

New students may be awarded scholarships based on a holistic evaluation of students' academic achievement, financial need, community service and leadership experience. Full-time enrollment is required to receive institutional scholarships.

High Proficiency Scholarship
(funded by St. Louis College of Pharmacy)

High Proficiency scholarships are awarded to full-time returning students in professional years. Beginning with the student's junior year, the cumulative GPA calculated after the fall semester will be used for awards to be received in the following academic year. Award qualification is a cumulative GPA of 3.2 or higher at the end of the fall semester. Full-time enrollment is required to receive institutional scholarships.

Athletic Scholarships
(funded by St. Louis College of Pharmacy)

Student athletes may be eligible to receive institutional scholarships for participating in College athletics. Scholarship recipients and amounts will be determined by the Department of Intercollegiate Athletics.

Institutional Aid
(funded by St. Louis College of Pharmacy)

Eligibility requirements vary among awards, but are generally based on need or academic standing and enrollment in at least 12 credit hours per semester.

Annual and Endowed Scholarships
(funded by various sources)

Through the generosity of alumni, corporations and friends of the College, annual and endowed scholarships are awarded each year. These scholarships are separate from the College funded, merit-based institutional scholarships given. To be considered for the annual and endowed scholarships, students must complete an online application in the fall. Students are notified at the start of the application process.

Each year, the College hosts a Scholarship Awards Dinner at which annual and endowed scholarships are awarded. For the 2018-19 academic year, 207 awards totaling $463,000 in scholarship assistance were presented to 193 students. Selection criteria for these largely need-based scholarships may also be based on academic achievement and other qualities such as leadership, professional attitude, community service or employment. In each case, the donor of the scholarship helps set the criteria for the scholarship.

For more information about scholarships and awards, please contact the Office of Advancement.

External Aid
(funding by external sources – i.e., employers, scholarship foundations, local businesses, etc.)

Eligibility requirements will vary and are established by the entity making the award. Students are required to report all sources of aid to the Office of Financial Aid regardless of aid type (grant or loan). Aid must be reported even if the benefits are paid directly to the student.

FINANCIAL SCHOLARSHIPS

Each year, deserving students are selected for annual scholarships by St. Louis College of Pharmacy. To be eligible for these scholarships, the student must meet specific criteria established for individual awards. Students must complete an online application prior to the conclusion of the fall semester in order to be eligible. Awardees are expected to attend the scholarship dinner to receive their award. The following will disqualify a student from consideration: a severe violation of academic dishonesty or nonacademic probation.

DISBURSEMENT OF AID

Pell, FSEOG, Health Profession Loans, Federal Direct Loans, PLUS Loans and institutional aid will automatically be credited to the student's account.

The following is a list of awards that are not automatically credited to the student's account: Federal Work-Study, private loans, Missouri state grants and external aid where funds must be disbursed to St. Louis College of Pharmacy. These awards are applied to students' accounts upon receipt of funding. Disbursements requiring student or parent signatures will be applied upon receipt of signatures. Federal Work-Study is paid directly to the student, minus taxes, as they earn the wages.

Financial aid is first applied to tuition and fee charges, then to on-campus room and board expenses. If a student receives additional external aid (scholarships or loans) that exceeds these charges, the student should complete and submit a refund request directly to the Business Office. Refunds will be issued to the student based upon the policy of the Business Office. Financial aid cannot exceed cost of attendance as defined earlier in this catalog.

The Business Office will not be notified of awards received until the student accepts the awards online at **stlcop.edu/netpartner**.

SPECIAL CIRCUMSTANCES

If a student has special circumstances or the financial situation has changed since completing the Free Application for Federal Student Aid (FAFSA), the student should contact the Office of Financial Aid for additional information and instruction.

AWARD CONDITIONS

St. Louis College of Pharmacy may adjust financial aid to reflect changes to the student's personal or financial circumstances, registration changes or new resources available. If a change in the aid package is required, the Office of Financial Aid will send a revised award notice to the student.

The student's award offer is based upon the number of credit hours indicated on the student's registration report recorded by the Office of the Registrar. It is the student's responsibility to notify the Office of Financial Aid immediately of any changes in registration, marital status, housing arrangements or any external awards.

Federal tax transcripts must be submitted upon request in order to comply with federal regulations. If the actual IRS data is different from that reported on the aid application, the Office of Financial Aid will revise the award offer accordingly.

Awards from government and private sources are dependent upon receipt of funds from the appropriate agencies. The student is responsible for any reapplication process needed to continue receipt of these funds. The College will not replace funds lost due to nonrenewal of applications. Awards in the financial aid package may vary from year to year depending on financial circumstances and availability of funds.

Eligibility for all federal aid requires students to meet the following criteria:

- The student is a U.S. citizen or eligible noncitizen.
- The student does not owe a refund on any federal grant or loan.
- The student is not in default on any federal loan or has made satisfactory arrangements to repay any defaulted student loan.
- The student has not borrowed in excess of the federal loan limits, under Title IV programs, at any institution.
- Must have resolved any drug conviction issues.

- Does not have a property subject to a judgment lien for a debt owed to the United States.
- Is not incarcerated in a federal or state penal institution.
- Male students receiving federal assistance must certify selective service registration status.
- Students must maintain satisfactory academic progress (SAP) as outlined in the satisfactory academic progress for financial aid section of this catalog.
- Must be enrolled as a regular student in an eligible program.
- Cannot also be enrolled in elementary or secondary school.
- Must have a high school diploma or equivalent, pass an approved ability-to-benefit test or have been home-schooled.
- Must meet enrollment status requirements.

RENEWING AWARDS

Undergraduate students are eligible to renew institutional awards through their four undergraduate years. Renewal criteria are:

- Freshman year (renewing awards for sophomore year): Students must achieve a GPA of 3.0 or higher in their initial fall semester and remain in good academic standing (as defined by the Office of the Registrar) for their initial spring semester. Full-time enrollment status must be maintained.
- Sophomore year (renewing awards for junior year): Students who renewed their awards for their sophomore year and achieve a cumulative GPA of 3.0 or higher at the end of their sophomore fall semester receive first priority. Full-time enrollment status must be maintained.

Students with any instance of academic dishonesty or Honor Code violation on their record, or severe instances of nonacademic misconduct such as suspensions or dismissals, will immediately forfeit any institutional scholarship or institutional grants awarded by the Office of Financial Aid. Scholarship forfeiture will occur when the Office of Financial Aid receives notification of such a violation from the Office of the Dean.

SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID

In accordance with Federal regulations (34CFR 668.32(f)), the Office of Financial Aid conducts evaluations of satisfactory academic progress to determine students' eligibility for continued receipt of Title IV financial aid (Pell grants, FSEOG, Direct Loans). The financial aid evaluation of satisfactory academic progression is based on the College's academic probation and dismissal policies. The academic probation and dismissal policies are applicable to all students pursuing degrees at the College, regardless of their eligibility for Title IV financial aid. Academic performance is monitored by a team of members from the Office of the Deans, the Office of the Registrar and the Faculty Appeals Committee. Students are required to maintain good academic standing while meeting appropriate academic benchmarks designated for their specific levels of study.

Students will be considered to be making satisfactory academic progress as long as they are permitted to continue pursuit of their declared degree program without being placed on academic probation or becoming eligible for dismissal from the College. Satisfactory progress is measured following each period of enrollment, including summer terms.

Financial Aid Warning

When a student fails to meet the academic good standing requirements, the Office of the Deans will place the student on academic probation and will recommend specific terms and timeframes for improvement. A student placed on their first academic probation will also be placed on financial aid warning.

Students on financial aid warning are eligible to receive Title IV funds for the period of enrollment to which their academic probation applies. Failure to satisfy the terms to return to good academic standing as stated by the Office of the Deans will result in students being placed on financial aid suspension until they return to good academic standing.

Financial Aid Suspension

Students eligible for academic dismissal from the College as determined by the academic probation and dismissal policies and the Offices of the Deans will be placed on financial aid suspension. The Offices of the Deans and Financial Aid will notify the student of a suspension in writing.

Suspension results when a student fails to correct deficiencies during a probationary period. Students placed on financial aid suspension are not eligible to receive Title IV funds. Financial aid suspension will be lifted for students allowed to continue in their declared degree program once they resume standards of good academic standing according to the academic probation and dismissal policies.

Notification of Financial Aid Status

Students placed on financial aid warning or suspension will receive a letter from the Offices of the Deans and Financial Aid detailing the reasons for and consequences of the financial aid status. The letter will also cite the stipulations listed in their Academic Probation letter as conditions for resuming satisfactory progress.

Appeals

Any student who can demonstrate that failure to maintain satisfactory academic progress is due to extenuating circumstances beyond the student's control may file an appeal in writing to the office of the appropriate dean, the director of financial aid and the president of the College. Appropriate documentation must be submitted to support the appeal. Extenuating circumstances generally involve personal matters that significantly impact the student's academic performance.

The director of financial aid will consult with the Office of the President, the Office of Financial Aid, the Office of the Registrar, and the coordinator of academic advising before deciding if the appeal will be approved. Failure to provide supporting documentation may result in a delay or denial of an appeal. All financial aid will be placed on hold while appeals are pending. Inquiries into the reinstatement of aid may be directed to files and notes kept by the Offices of the President and the Deans in instances when extenuating circumstances were revealed during interviews that were not initially reported in students' letters of appeal.

Successful appeal of academic status to the Faculty Appeals Committee will not guarantee a successful appeal of financial aid suspension. Financial aid suspensions will be considered separately from academic appeals.

Financial Aid Probation

Students removed from suspension by appeal will be placed on financial aid probation for the semesters specified. The student will be notified in writing. Students on probation may receive Title IV financial aid during the probationary period of enrollment, but may be placed on suspension during subsequent periods if satisfactory academic progress is not resumed.

Repeat Students

If students are required to repeat an academic year, they will continue to be eligible to receive federal student aid for the repeat period as long as they are not on financial aid suspension and remain within the maximum timeframe allowed for their level of student (undergraduate or graduate). The student will meet with a financial aid officer to discuss their enrollment status and federal aid eligibility.

Maximum Time Frame

In the Doctor of Pharmacy with integrated Bachelor of Science program, students are defined as undergraduate during the first three years of enrollment and as graduate during the final four years of enrollment.

The maximum length of time in which students must complete the academic undergraduate portion of the College's curriculum is four and one-half years, and the maximum length of time in which students must complete the academic graduate portion of the College's curriculum is six years. Students classified as undergraduate or graduate for more than the aforementioned time frame are subject to financial aid suspension until their enrollment status changes.

Students entering the Doctor of Pharmacy program must complete the program in 10 and one-half years to remain eligible for Title IV financial aid. Students entering the College as transfers into the Doctor of Pharmacy program have one and one-half times the years remaining to graduation from their year of entry to complete the Doctor of Pharmacy program and remain eligible for Title IV financial aid.

Students pursuing only the bachelor's degree must complete their degree program in six years to remain eligible for Title IV funds.

Quantitative Evaluation, Incomplete Grades, Course Withdrawals and Course Repetitions

Students may continue receiving federal student aid in semesters immediately following those in which an incomplete grade or course withdrawal (W) is received, as long as the student is not otherwise eligible for financial aid suspension and is still on pace to graduate within the maximum time frame.

Students must have successfully completed (passed) at least 67% of the total credit hours that they have attempted at the time of evaluation. Courses from which students withdraw earning a W on their transcript are counted as hours attempted, though they are not used in grade point average calculations.

Credit hours transferred from another institution that are accepted toward a student's degree program count toward a student's attempted and completed credit hours in the quantitative evaluation. Students failing to achieve these benchmarks may be permitted to continue pursuit of their declared degree program, but eligibility to receive Title IV aid will be affected. Students attempting more than 1.5 times the total credit hours required to complete their degree program will be subject to financial aid suspension. For example, students must complete the 123 credit hours required to earn a Bachelor of Science in Pharmaceutical Sciences with an emphasis in Health Sciences in no more than 185 attempted credit hours.

Students may receive federal student aid for a passed course taken a second time (first repeat of passed course). After enrolling in a passed course twice, students will no longer have the course's credit hours calculated for student enrollment status for federal financial aid eligibility. Students may receive federal student aid for repeated failed courses until a passing grade is earned.

All incomplete grades must be resolved in accordance with academic policies listed in the Academic Records portion of this Academic Catalog. Unresolved incomplete grades converted to failing grades will result in a new review of students' satisfactory academic progress from the previous enrollment period.

FINANCIAL AID VERIFICATION POLICY

Verification is the process of checking the accuracy of the information supplied by financial aid applicants on the Free Application for Federal Student Aid (FAFSA).

The verification requirements delineated in this policy statement apply to all applicants for federal student aid under the following programs:

- The Federal Pell Grant Program
- The Federal Supplemental Educational Opportunity Grant Program
- The Federal Work-Study Program
- The Federal William D. Ford Direct Loan Program

For verification purposes, the College defines a financial aid applicant as an enrolled student who is eligible to receive a federal financial aid award. Aid will not be disbursed from any of the aforementioned federal programs.

Verification Selection

It is College policy to verify all applicants selected for verification by the Central Processing System (CPS) and all Health Professions Loan recipients not selected by the CPS. The College also reserves the right to select additional applications for verification.

Notification of Selection

The student's federal Student Aid Report (SAR) will indicate whether or not the student's file has been selected for verification. The SAR is typically accessed

via a link sent to the student by the Department of Education after the student files their FAFSA. If the student is selected for verification, there will be an asterisk* next to their Expected Family Contribution (EFC) figure on their SAR.

The student will also receive notification via email from the Office of Financial Aid alerting them of their selection and detailing the additional documentation they will be required to submit before their financial aid awards are considered official and disbursable. This statement will be sent when the Office of Financial Aid sends notification of the student's award package which typically occurs within weeks of their FAFSA submission.

Verification Documentation

The College encourages all eligible FAFSA filers to use the IRS Data Retrieval Tool to import financial information from the IRS into the FAFSA to ensure accuracy and reduce documents that must be submitted to satisfy verification selection.

Dependent students selected for verification must submit a Federal Dependent Verification Worksheet signed by the student and a parent. Parent and student tax return transcripts must be obtained from **irs.gov** for selected students who do not use the IRS Data Retrieval Tool. Individuals reporting income, but not required to file a federal tax return must submit copies of all federal W-2s received the reported tax year.

Independent students selected for verification must submit a Federal Independent Verification Worksheet signed by the student and their spouse (when applicable). Student and spouse (when applicable) tax return transcripts must be obtained from **irs.gov** for selected students who do not use the IRS Data Retrieval Tool. Individuals reporting income, but not required to file a federal tax return must submit copies of all federal W-2s received the reported tax year.

Verification Submission Deadlines

The College strongly recommends all verification documents be submitted to the Office of Financial Aid within three weeks of the College's notification of selection. The official submission deadline for Pell grants, regulated by the U.S. Department of Education, will be followed at the College and can be located in the Federal Register. No federal, state and institutional aid will be disbursed until all required verification submissions are received by the Office of Financial Aid.

Applicant Correction and Notification Procedures

The Office of Financial Aid will electronically submit to the Central Processor System corrections to the FAFSA data resulting from verification. The Central Processor System will then send an SAR Information Acknowledgment to the applicant as notification of these corrections. Applicants will also be notified of award changes resulting from verification by the receipt of an updated award notification from the Office of Financial Aid.

Verification Items

Students are classified by the U.S. Department of Education into three verification groups. Items verified are directed by this classification. All Health Professions Loan recipients not selected for verification will be subject to the V1 Standard Verification Group classification.

Financial Aid Standard Verification Group

V1 – Standard Verification Group

DATA ELEMENT	STUDENT	PARENT/ SPOUSE	DOCUMENTATION
Household size	YES	YES	Dependent Verification Worksheet
Number in college*	YES	YES	Dependent Verification Worksheet
Adjusted gross income	YES	YES	IRS Data Retrieval/Tax Return Transcript
U.S. income tax paid	YES	YES	IRS Data Retrieval/Tax Return Transcript
Other untaxed income	YES	YES	IRS Data Retrieval/Tax Return Transcript
Education tax credits	YES	YES	IRS Data Retrieval/Tax Return Transcript
IRA and KEOGH/SEP deductions	YES	YES	IRS Data Retrieval/Tax Return Transcript

**Parents in college are not included.*

V5 – Aggregate Verification Group
High school completion status
Identity/Statement of Educational Purpose
All items listed in the V1 group

Individuals reporting income, but not required to file a federal tax return must submit copies of all federal W-2s received the reported tax year.

HARASSMENT, SEXUAL MISCONDUCT, RELATIONSHIP VIOLENCE, STALKING

Title IX of the Higher Education Amendments and the Violence Against Women Act prohibit harassment, sexual misconduct, relationship violence and stalking. The Student Code defines these offenses and establishes policies and procedures for reporting incidents, obtaining help from confidential and nonconfidential resources, and filing complaints with the College or law enforcement authorities. It also discusses internal investigations, conduct hearings, appeals and sanctions.

The College conducts education and training programs for all students, faculty and staff to raise awareness and help prevent incidents of harassment, sexual misconduct, relationship violence and stalking. Furthermore, the College has authority and jurisdiction to impose sanctions on a student found in violation of laws that violate the Student Code, regardless of whether the violation occurred on campus, off campus or at a College-sponsored event.

As with many problems you may encounter, reporting incidents is the only mechanism by which sexual misconduct offenders can be officially sanctioned by the College. This also reduces the risk of repeat occurrences. All students can obtain information and report incidents on a confidential or nonconfidential basis by contacting a College administrator or the St. Louis City Police.

The policy is quite extensive. Please refer to the Student Code or contact the following College officials should you have any questions, concerns or a need to learn more about the policy:

Section 504 and Title IX Coordinator
Daniel Bauer, PHR, Director of Human Resources
Jones Hall, Room 1309
314.446.8308
daniel.bauer@stlcop.edu

Deputy Section 504 and Title IX Coordinator for Students
Rebecca Jones, Assistant Vice President for Student Affairs
Recreation and Student Center, Room 411
314.446.8352
rebecca.jones@stlcop.edu

STUDENT CONDUCT

Students are expected to conduct themselves in a manner that will be a credit to the College and the profession of pharmacy and health care. Students are expected to observe the rules and regulations of the College as specified in the Student Code. Any student found responsible for conduct detrimental to the best interests of the College may receive sanctions up to and including expulsion from the College.

ACADEMIC AND PERSONAL SUPPORT

Student Success Center

Students at the College have access to a wide variety of resources to help them be successful academically and personally. The Student Success Center located on the fourth floor of the Recreation and Student Center provides one-stop access to these resources.

Academic Advising
Each student will be assigned a faculty advisor who will help guide the student with academic, cocurricular and career planning. Students in the undergraduate program will be assigned to a faculty advisor in the School of Arts and Sciences. Students in the professional program will be assigned to a faculty advisor in the School of Pharmacy.

In addition to faculty advising, the Office of Student Affairs offers individual academic coaching and advising for students that need a more comprehensive plan for success. These plans may include a change in study habits, improving time management skills or learning to better manage stress. Staff will help students develop a plan that best suits their needs and goals.

Transfer Mentor Program
The purpose of this mentor program is to help transfer students successfully adjust to a new environment and, in some cases, transition from a pre-health care curriculum into the professional program at the College. This program provides an increased awareness of the College's programs and resources while stressing the importance of campus involvement and community engagement.

Tutoring Program

The Tutoring Program is sponsored by the Office of Student Affairs and is free to students. The goal of the program is to provide additional academic support to students in specific classes. The Tutoring Program is designed to improve the academic standing and successful retention of students through walk-in and group sessions, and private and small group tutoring.

Norton Writing Center

The Norton Writing Center is a free consulting service that offers one-on-one assistance from trained students with all types of writing. The center assists with resume and CV development, cover letters, essay-test writing and other writing topics. Students seeking additional language and writing support can meet with the director for guidance. In addition, the center holds workshops and produces handouts for citation, style, grammar and punctuation.

Disability Support Program

The Disability Support Program, or the Americans with Disabilities Act (ADA) Program, is coordinated by the assistant director of academic support. The assistant director serves as the liaison between students, faculty and administration, advocating fair and reasonable student accommodations.

Library

The two-story library is located on the west end of the Academic and Research Building. Within the library, students, faculty and staff will find books, journals and other media. Not only does the library offer many educational resources, but it also provides a comfortable environment where students can read and study, and it has ample study space that is accessible 24/7.

The online portion of the library gives students the opportunity to explore what the library has to offer, with access to databases, e-books, electronic journals and interlibrary loan requests.

Counseling Center

The Counseling Center is located in the Office of Student Affairs on the fourth floor of the Recreation and Student Center. Counseling services are available for any students currently enrolled at the College. Students often seek therapy for adjustment to college, depression, anxiety, relationship issues and life transitions. These services are confidential, free of charge and are completely separate from your academic record.

Information Technology

Our IT professionals can assist students with computer support, database management and instructional media development. Contact the Technical Support Center at ext. 5555 for assistance. The center is open from 7:30 a.m.-7 p.m. Monday through Thursday and 7:30 a.m.-5:30 p.m. on Friday during the academic year. Holiday hours are posted as needed.

NOTEBOOK COMPUTER PROGRAM

All students are required to have purchased a St. Louis College of Pharmacy (College) approved laptop prior to the start of classes. Students are encouraged to use this laptop for their entire College careers, but may purchase a new laptop at any time. While personal use is permitted, students must be aware of appropriate use policies. Attempts to hack or break into any College system, user account or technology is strictly prohibited.

Students should be familiar with the operation of the notebook, and always contact the appropriate resources when problems or questions arise. Students may purchase additional accessories and peripherals for the notebook, but these must be limited to external components only. Internal components may not be upgraded or replaced by students. Students should ask a St. Louis College of Pharmacy help desk technician if they are unsure about any additions to the notebook. The student is ultimately responsible for the care and safety of the notebook. If it is damaged or stolen, then the student must follow established procedures.

Each student will:

- Sign an acceptable use policy and a responsibility agreement upon receipt of the computer.
- Be responsible for all policies and procedures as described in the acceptable use policy, responsibility agreement and the St. Louis College of Pharmacy notebook guide.
- Use the computer ethically and legally to enhance their educational experience.
- Comply with all applicable copyright and licensing laws and regulations when gathering or sharing information using this computer.
- Adhere to the software license agreements for all applications installed on the computer.
- Not disassemble or open the computer to access the internal components for any reason. Only St. Louis College of Pharmacy or Fujitsu Notebook technicians are authorized to do so. Failure to comply could void the computer warranty.
- Promptly inform St. Louis College of Pharmacy in the case of theft, follow all applicable reporting procedures and take responsibility for any replacement costs. Students are required to provide the College with a police report.
- Promptly bring the computer to the shop if damaged and pay for any incurred cost.
- Limit upgrades and additions to external peripherals only and not upgrade or replace any internal components.
- Back up data regularly as outlined in the training materials and understand that the College is not responsible for any loss of data.
- For additional information, please call the St. Louis College of Pharmacy help desk at 314.367.8700, ext. 5555.

INTERNATIONAL TRAVEL

Any student participating in international travel funded by St. Louis College of Pharmacy, awarded credit by the College, or otherwise sponsored or supported by the College, including but not limited to international trips in connection with a College-recognized and College-funded student organization must receive authorization by following the College's International Travel Policy. The College cautions students against unauthorized international experiences for safety, health and liability reasons (see Page 19 for more information on Professional Liability Insurance). The complete International Travel Policy and detailed requirements are available at **policies.stlcop.edu**. Contact the director of the Office of International Programs with any questions.

COMMENCEMENT CEREMONIES

St. Louis College of Pharmacy holds commencement exercises in early May which will include the awarding of undergraduate degrees (for Professional Year 1 students or senior students who have completed all degree requirements) and the Doctor of Pharmacy (for Professional Year 4 students who have completed all degree requirements). Students anticipated to complete all required degree requirements by December 31 of the graduation year are eligible to participate in the May commencement exercises.

Note: Students not completing the Pharm.D. program by the May Commencement date will be given a graduation date of the 30th of the month when advanced pharmacy practice experiences (APPE) are complete (e.g., if a student completes APPE courses by June 4, the official graduation date will be June 30).

If fees or obligations to the College remain unpaid after the student has graduated or leaves the school, the College reserves the right to withhold applications for state board examinations and certified copies of student academic transcripts, as well as the student's diploma.

ACADEMIC RECORDS

Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) is a federal law designed to protect the privacy of students' educational records.

Parents' Rights

The rights of FERPA, originally given to parents of students in K-12, are transferred to their students once they begin college. According to FERPA guidelines,

all rights of parents (including the right to examine education records and consent to the disclosure of personally identifiable material) transfer to the student either at age 18 or upon attendance at an institution of postsecondary education. Educational information will be released to a student's parents only with the written consent of the student or if the student is claimed as a dependent on the parents' federal income tax return.

The following process should be followed by parents seeking information contained in their student's education records:

- The parent should make their request in writing, indicating the particular records requested and declaring specifically that the student is the requestor's dependent.

St. Louis College of Pharmacy must ask for the federal income tax form filed by the parents for the most recent tax year. This means the requesting parent must provide a copy of the federal income tax form for the current year. It cannot be a tax form from several years ago. The College will then verify that the student is indeed listed as a dependent on the tax form of the requesting parent. Once verification is made, the form will be given back to the parent and a note will be made on the request form that the verification was made.

Because the FERPA rights belong to the eligible student, the College will notify the student that their parents have asked to review their records and on what date the review will take place. If the student responds that they do not want the records shared with the parents, the College will refer the parents back to the student. At this point, a written consent is required from the student.

A one-time authorization to disclose educational records may be requested by the student in the Office of the Registrar.

Spouses' Rights
FERPA recognizes a spouse as an unrelated third party and does not make any provision for a spouse to have access to a student's educational records without the written consent of the student.

Students' Rights
FERPA affords students certain rights with respect to their education records. They are:

1. The right to inspect and review their education records within 45 days of the day the College receives a request for access.

   Students should submit to the Office of the Registrar, the Office of the Dean of Arts and Sciences or the Office of the Dean of Pharmacy, the chair of the academic department, the Director of Community Standards or another appropriate official written requests that identify the records they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of their education records if the student believes they are inaccurate or misleading.

   Students should write the College official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading.

   If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of their right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosure of personally identifiable information contained in their education records, except to the extent that FERPA authorizes disclosure without consent.

One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill their academic or enrollment services responsibilities. A school official is a person employed by the College in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff), a person or company with whom the College has contracted (such as an attorney, auditor or collection agent), a person serving on the board of trustees or a student serving on an official committee, such as disciplinary or grievance committee, or assisting another school official in performing their tasks.

Upon request, the College discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

Disclosure without consent also may be made to:

a. Certain government officials in order to carry out lawful functions
b. Appropriate parties in connection with financial aid to a student
c. Organizations doing legitimate studies for the school accrediting agencies
d. Individuals who have obtained court orders or subpoenas
e. Persons who need to know in cases of health or safety emergencies
f. State and local authorities to which disclosure is required by state laws
g. Schools also may disclose, without consent, directory information unless notified in writing by the student to the Office of the Registrar. St. Louis College of Pharmacy has designated the following as directory information:

    a. Name
    b. Address
    c. Telephone number
    d. Date of birth
    e. Enrollment status
    f. Dates of attendance (including whether currently enrolled)
    g. Degree awarded
    h. Photograph
    i. Email address

An eligible student who does not wish for directory information to be released without consent must notify the Office of the Registrar within the first 10 days of the term. If this notification is not received prior to this deadline, it will be assumed that the directory information may be disclosed for the remainder of the current academic term. Notification for nondisclosure must be sent to the Office of the Registrar each academic term.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by St. Louis College of Pharmacy to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

    Family Policy Compliance Office
    U.S. Department of Education
    400 Maryland Ave., SW
    Washington, DC 20202-5920
    ed.gov/policy/gen/guid/fpco/index.html

5. Any student may file a complaint concerning an alleged violation of the Higher Learning Commission Accreditation Standards by submitting a written complaint to:

    The Higher Learning Commission
    230 South LaSalle St., Suite 7-500
    Chicago, IL 60604-1413

6. Any student may file a complaint concerning an alleged violation of the Accreditation Council for Pharmacy Accreditation Standards by submitting their complaint in writing to:

    a. The Office of the Dean of Pharmacy and
    b. Accreditation Council for Pharmacy Education
    190 S. LaSalle Street, Suite 2850
    Chicago, IL 60603-3410

Any student may file a complaint concerning an alleged violation of the Missouri Department of Higher Education Institutional Eligibility Standards by submitting a written complaint to:

Missouri Department of Higher Education
205 Jefferson St.
P.O. Box 1469
Jefferson City, MO 65102-1469

7. Students may request a copy of documents describing the College's accreditation, federal eligibility certification and state eligibility certification by submitting a written request to the Office of the Registrar.

Classification of Students

Each fall and spring semester lasts approximately 15 weeks. Full-time status means 12 or more credit hours must be taken in a semester. A student taking at least six, but less than 12, credit hours is classified as half-time. Anyone taking less than six credit hours is classified as less than half-time.

In the last year of the professional program, students must take 10 or more credit hours to be considered full-time. A student taking five to nine credit hours is classified as half-time. Anyone taking less than five credit hours is classified as less than half-time.

For enrollment reporting, the Office of the Registrar will use the last date of final exams as the final date of a semester. The last date of required attendance in the last year of the professional program will be used for the exit date of students graduating from the professional program.

Undergraduate students are classified according to the number of earned credit hours, including transferred credit. The required number of hours for each classification is:

CLASSIFICATION	SEMESTER HOURS OF EARNED CREDIT
Freshman (FR)	Fewer than 30
Sophomore (SO)	30-59
Junior (JR)	60-89
Senior (SR)	90 or more, but not pursuing Pharm.D.

Students are classified after course registration and prior to the start of each fall semester based on official academic records on file with the Office of the Registrar at that time. Students may be reclassified prior to the start of each fall semester, but no classification changes will be made after the first day of courses. All undergraduate students are assigned an anticipated graduation date based on the expected date of bachelor's degree conferral for their respective classification. Upon entry into the professional program, students are assigned a second division (professional) with an expected date of Doctor of Pharmacy conferral. Professional program students are classified (P1, P2, P3 or P4) based on this expected date of completion.

Registration

(Excluding concentrated experiential courses – See Professional Policies and Information)

Registration is an official part of the academic year. By registering, the student subscribes to the terms and conditions, financial and otherwise, which have been set forth by the College. Under no circumstances will a student be allowed to attend a class without officially registering for the course online or in the Office of the Registrar. Academic credit will not be awarded if the student is not registered. A correct registration is the responsibility of the individual student.

Each fall and spring semester the College schedules 3-5 weeks of preregistration to allow for academic advising. All students must meet with a faculty advisor, submit all required advising documents and have no account hold to be eligible to register.

Lecture-based class sessions are typically 50 minutes per credit hour. Laboratory periods and discussion and recitation periods are typically two or three hours per credit hour. During the advanced pharmacy practice experiences in the final year of the professional program, students will spend a minimum of 40 hours per week in assigned, College-approved health system pharmacy, community pharmacy and other clinical practice sites.

Students may add a course to their schedule within the first 10 days of the semester (or first two days of a summer session under normal circumstances) with permission of the instructor.

Students in the professional program cannot drop or withdraw from required courses that are prerequisites for courses taught in the subsequent semester, regardless of their academic performance in such courses, unless extenuating circumstances exist and the Office of the Dean of Pharmacy has approved.

Students may drop other courses within the first 10 days of the semester (or first two days of a summer session) provided that the student is in good academic standing (i.e., not on academic probation). A student may withdraw from other courses with a grade of W with permission from the instructor, the academic advisor and the Office of the Registrar, through the 11th week of the semester (or the first week of a summer session), provided the student is in good academic standing (i.e., not placed on academic probation the previous semester). The specific date for withdrawing from courses will be announced at the beginning of each semester.

Occasionally, a person not registered with the College or a student enrolled at the College may audit (AU) a course. Academic credit cannot be granted for an audited course. Individuals are permitted to audit a course only when classroom space is available. The course instructor or the appropriate Office of the Dean may refuse any request to audit a course. Permission to audit a course entitles the person to attend class, but not to take exams or complete graded assignments. To have documentation that an individual audited the course or to have the audit appear on a transcript, arrangements must be made with the instructor at the beginning of the course so that attendance throughout the semester can be verified. Students taking at least 12 credit hours of regular courses may audit a course at no additional cost. Students taking less than 12 credit hours will be charged $100 per course audited. Full-time students may only audit a course already taken to enhance their knowledge of the topic.

A permanent record of student progress is maintained by the Office of the Registrar. Students can examine their personal records at any time during the school year.

Students are responsible for following academic procedures and meeting degree requirements in order to graduate.

Leave of Absence

St. Louis College of Pharmacy recognizes that there are situations when a student may require a leave of absence. If such a situation arises, a student must submit a written request to the Office of the Dean of Arts and Sciences (for undergraduate students) or the Office of the Dean of Pharmacy (for professional program students). This letter must include the reason

for the leave and the time period requested. The student normally will receive a letter from the appropriate Office of the Dean within five business days stating approval or disapproval of the leave, and the student will then be given a reapplication deadline. If the student does not return by the reapplication deadline or is not granted an extension by the appropriate Office of the Dean, the student will be considered unofficially withdrawn from the College. Leaves normally are permitted for a maximum of one year and are issued for medical or personal reasons. Classes taken outside the College during the period of the leave will not be accepted as transfer credits. Exceptions to this policy will be determined by the appropriate Office of the Dean.

A leave requested after the official withdrawal date in a semester will be granted only if there are serious extenuating circumstances.

Withdrawing from the College

All students seeking to withdraw from the College are strongly encouraged to initiate the official withdrawal process by contacting the Office of the Registrar (second floor of the Academic and Research Building). The date when the student initiates the withdrawal process will be recorded as the last date of attendance, unless a more accurate date is agreed upon by the student and the student's course faculty. The Office of the Registrar will notify all appropriate departments of the student's exit from the College. The last date of final exams for the most recently completed period of enrollment will be recorded as the final date of attendance for the student officially withdrawing at the end of, or between, periods of enrollment.

Students who do not notify the Office of the Registrar of their intent to withdraw will be considered unofficially withdrawn from the College. More specifically, students are considered unofficially withdrawn if:

- They do not register for an immediately subsequent semester without notifying the Office of the Registrar of their intent to leave the College.
- Students earn failing final grades (F) in all courses they were registered in for the semester due to a lack of academic activity.
- Students begin a period of enrollment, but are noted as absent throughout the period.

The Office of the Registrar will first attempt to discover a consensus last date of attendance for unofficially withdrawn students by contacting the students' course faculty. The Office of the Registrar will use the students' last date of final exams for the semester in question when consensus for the last date of attendance is unobtainable from faculty. Students continually noted as absent (normally reported by faculty) throughout the semester will receive a final date of attendance that is the midpoint date for the semester (50 percent).

Students who officially or unofficially withdraw from the College may apply for readmission by submitting a new application to the Office of Admissions.

Students who are dismissed from the College for any reason may apply for readmission by submitting a new application to the Office of Admissions for entry no sooner than two full academic terms (fall and spring) after the date of the dismissal. The application will be reviewed by the appropriate Admissions and Progressions Committee. Please refer to the Office of Admissions for application deadlines.

Grades

Final course grades are available to students via Campus Web (the online registration program) immediately following the end of each semester and are not available verbally to students through the Office of the Registrar. Students questioning their grades should discuss the matter with the instructor as soon as possible after grades are issued. Students requesting a grade change must do so prior to the end of the next semester.

Computation of Scholastic Standing

St. Louis College of Pharmacy uses the 4.0 grading system to determine grade point average (GPA). GPA is calculated by multiplying the number of credit hours for a given course by the number of grade points for the letter grade received, totaling the grade points earned, and dividing that total by the number of credit hours attempted.

Passing grades in advanced pharmacy practice experiences and introductory pharmacy practice experiences are indicated by the letter grades A through C. Any grade below C (Note: A letter grade of C- is considered to be less than C) is indicated by the letter grade F, and the rotation must be repeated.

A grade of incomplete (I) can be given by a faculty member if the student is unable – due to extenuating circumstances such as illness or injury – to complete all of the required coursework during the semester. Ordinarily, an I is not to be given to allow a student to redo coursework previously completed in an effort to improve the student's grade in the course. Incomplete grades normally must be made up no later than 10 school days following the beginning of the next semester. Otherwise, the I is converted to an F.

For some courses in the professional program, students who do not meet course competency standards as defined in the course's syllabus, may qualify for remediation and reevaluation of the course instead of needing a full repeat or retake of the course the next time the course is normally offered. Students who qualify for remediation and reevaluation in a course will be issued a Remediation Pending (RP) until the remediation and reevaluation process is completed. If the remediation and reevaluation is successfully completed, the RP will be replaced with the appropriate course grade. If remediation and reevaluation is not successfully completed, the RP will be replaced with the appropriate grade and the student will be required to repeat or retake the course in its entirety the next time it is normally offered. Please refer to course syllabi for the remediation and reevaluation policy and process used in the course.

Grade Point Average (GPA)
Four separate GPAs may be reported on the student's transcript: Semester GPA, cumulative undergraduate program GPA, cumulative professional program GPA and career GPA. The courses included in the cumulative undergraduate program GPA calculation and cumulative professional program GPA are designated in the degree requirements pages of this catalog. No course will be calculated in both the undergraduate program and professional program GPAs. All coursework taken at the College is included in the career GPA.

Calculating Grade Point Average (GPA)

$$\text{GPA} = \frac{(\text{credit hours}) \times (\text{grade points})}{(\text{credit hours attempted})}$$

GRADE	GRADE POINTS
A	4.00
A -	3.70
B+	3.30
B	3.00
B-	2.70
C+	2.30
C	2.00
C-	1.70
D+	1.30
D	1.00
D-	0.70
F	0.00
TG Transfer Grade	2.00

NO EFFECT ON GPA
W: Withdrawal
P: Pass
NC: No Credit
CR: Credit
I: Incomplete
AU: Audit/No Grade
PH: Pass with Honors
WIP: Work in Progress
RP: Remediation Pending

Scholastic Honors
Graduating students are eligible for several awards that are conferred at the Graduate Recognition Program. These awardees are determined by the faculty based on the specific criteria established for individual awards.

Dean's List
Students who maintain a semester average of 3.5 or better in a regular program of 12 or more credit hours for any semester are given Dean's list standing during the following semester.

Coursework Taken Outside the College

Students interested in completing coursework outside the College must submit a course transfer approval request to the Office of the Registrar. The Office of the Registrar, in consultation with a faculty expert, reviews and evaluates transfer credit equivalencies. An external course syllabus is provided to the appropriate department chair that at minimum contains the following information: course level, content, rigor, outcomes and textbook considerations. Upon approval by the department chair and faculty expert, the Office of the Registrar completes the Course Transfer Approval and notifies the student. A record of all approved transfer credit will be maintained by the Office of the Registrar. Courses taken outside of the United States must also be evaluated for U.S. institution equivalence by an organization approved by the Office of the Registrar.

A maximum of six hours of undergraduate free electives may be transferred in for credit and a maximum of six hours of professional electives may be transferred in for credit. Credit will not be awarded for courses completed more than seven years prior.

Approval will not be given to take coursework outside the College if the student's schedule can be reasonably modified to accommodate enrollment in the course during the same fall, spring or summer semester, or if such work will result in less than full-time study at the College during the semester in which the course normally would have been taken. Exceptions require approval from the appropriate Office of the Dean.

Courses taught at the College cannot be taken outside the College if the student is retaking the course due to having received a poor grade in that course or due to withdrawing from the course. Exceptions require approval from the appropriate Office of the Dean.

Upon receipt of an official transcript, admissible coursework completed outside the College will be transcribed as credit (CR) and will not affect the student's College grade point average. No credit will be transferred for grades less than C-. Courses which award grades of pass/fail may be deemed acceptable with appropriate documentation.

Summer Sessions

For progression purposes, summer sessions are not considered to be regular academic semesters, which means summer does not count as a probation semester. Unless noted otherwise in the summer school course schedule, students cannot take more than one course in each of the two summer sessions except with permission of the appropriate Office of the Dean.

Changes in Degree Requirements

The College reserves the right to make additions or changes, as necessary, to the undergraduate or professional curriculum to better meet accreditation guidelines or reflect continuous quality improvement.

Students who remain in good academic standing will graduate under the curriculum in place at the time of their entry into the professional curriculum, with the exception that course topics, sequences or credit hours may be modified. However, the total credit hour requirement needed for graduation will not change and no retroactive requirements for courses completed will be made. Students who do not remain in good academic standing, and who repeat courses or curricular segments, may be behind a year or more, and if so will be considered as part of that subsequent entering class. As such, they will be required to complete the curriculum in effect for that class.

Transcripts

Official and unofficial transcripts must be requested in writing and must bear the signature of the requesting student or may be requested online through the National Student Clearinghouse transcript services.

Transcripts will be issued only to students who are in good financial standing with the College. Transcripts will be processed within three business days, five business days during grading and registration periods.

UNDERGRADUATE POLICIES AND INFORMATION

Undergraduate Program Student Knowledge Domains and General Education Requirements (School of Arts and Sciences)

A primary purpose of the School of Arts and Sciences is to prepare students to lead useful and satisfying lives, to contribute and lead in their communities and to advance their chosen professions. To these ends, the College strives to provide its students a strong content foundation through a broad base of courses covering the following knowledge domains:

- **Humanities and Fine Arts (9 Cr. from at least two disciplines):** Students explore how historical and cultural contexts shape how individual and societal worldviews are informed.
- **Mathematical Sciences (3 Cr.):** Students solve mathematical problems from a variety of authentic contexts, use quantitative evidence to make appropriate conclusions, and communicate conclusions using a variety of quantitative formats.
- **Natural Sciences (6 Cr.):** Students investigate the natural sciences through coursework that exemplifies why scientific inquiry enhances our understanding of the natural world.
- **Oral Communication (3 Cr.):** Students examine how oral arguments can convey one's position while respecting the rights and needs of those whom with they are communicating
- **Social and Behavioral Sciences (6 Cr.):** Students study the ways human behavior and social interactions influence individuals, groups and society.
- **Written Communication (6 Cr.):** Students explore how written arguments can clearly define and support one's positions on an issue.

Undergraduate Program Ability-Based Program Outcomes (School of Arts and Sciences)

While the general education courses establish a foundation for knowledge acquisition, the College's ability outcomes expand beyond content and focus on skills that are scaffolded throughout the undergraduate curriculum. Students are expected to develop and demonstrate the following skills in accordance with the College's ability outcomes:

- **Written Communication:** The graduate writes clearly and effectively to diverse audiences for a variety of purposes.
- **Oral Communication:** The graduate enhances shared understanding by listening to, interpreting, developing and expressing ideas, verbally and nonverbally, in oral formats, across a range of technologies and for a variety of purposes and audiences.
- **Critical Thinking:** The graduate systematically explores and analyzes issues, assumptions, evidence, ideas and events before accepting opinions or formulating conclusions.
- **Problem-Solving:** The graduate identifies problems and potential approaches for solving them and designs, implements and evaluates effective and appropriate strategies to arrive at viable solutions.
- **Integrative Learning:** The graduate makes connections among ideas, bodies of knowledge and experiences to synthesize and transfer learning to new, complex situations.
- **Conceptual Understanding of Scientific and Mathematical Principles:** The graduate develops, manages and applies a scientific and mathematical knowledge base to evaluate information in a variety of contexts. This ability may be expressed when a student is asked to extrapolate trends and patterns from existing data, explain social, natural or behavioral phenomena and predict probable outcomes.
- **Valuing and Ethical Decision-Making:** The graduate makes decisions about personal and professional conduct through a process that relates values to ideas, actions and consequences and uses clearly defined ethical principles.

Attendance Policy for School of Arts and Sciences

The College encourages students to become involved in professional organizations on campus as a way to develop their leadership skills and to gain an appreciation for the role that such organizations play within their future professions. Students may be excused from classes for a maximum of three days to attend professional meetings, as long as the following criteria are met:

- The student must be in good academic standing. Any student on academic probation will not be excused from classes.
- The student must have demonstrated an active involvement in the student organization and must have the approval of the organization's faculty advisor (when appropriate) to attend.
- The student must make arrangements with any instructors whose class will be missed at least two weeks prior to the meeting to make up any course assignments or exams the student will miss while attending the professional meeting.

The college recognizes that our student body is culturally diverse. If a student's religious or moral convictions dictate that they observe holidays or religious events not provided for in the College calendar, the student should make arrangements with any instructors whose class will be missed to arrange for completion of any missed assignments or exams.

Students who are, or will be, absent from classes should notify the Office of the Dean of Arts and Sciences and their instructors directly by voicemail or email.

Repeating or Retaking Courses

When a course is repeated or retaken at the College, the grade earned will replace the initial grade, even if that grade is lower than the initial grade.

Academic Probation and Dismissal

In accordance with Title IV regulations, a student attending St. Louis College of Pharmacy is required to remain in good academic standing and maintain satisfactory academic progress.

Undergraduate Program Probation Policy
A student will be placed on academic probation, and is considered not in good academic standing, if they earn a semester GPA less than 2.00 (even if the cumulative undergraduate program GPA is greater than 2.00). In order to be removed from academic probation, the student's semester and cumulative undergraduate program GPA at the end of the probation period (one semester) must be 2.0 or greater.

Undergraduate Program Dismissal Policy
A student will be subject to academic dismissal from the College for any one of the following reasons:

- Student is placed on academic probation in two consecutive semesters.
- Student is placed on academic probation for a third time (nonconsecutive).
- Student fails to meet probation requirements (if on probation from the previous semester).

The procedures for appealing an academic dismissal are outlined in the Student Code.

Liberal Arts Convocations Series

The Liberal Arts Convocations (LAC) series deepens and extends the curriculum's connections to the great varieties of human experience and discourse. To help prepare graduates with a broad and meaningful humanistic foundation, the College requires all undergraduate students (both traditional and transfers) who enter the College in fall 2015 or after to attend at least two LAC credit-eligible events per semester for a minimum total of four per year throughout their undergraduate careers at the College (at least 16 total for traditional four-year students). Students are encouraged to attend all events and may earn up to three attendance credits per semester.

Requirements for Graduation

Requirements include:

- A minimum of 40 credit hours of 300- or 400-level courses (transfer hour equivalency will be determined on an individual basis)
- A minimum of 48 credit hours that contribute to an undergraduate degree completed at the College
- A career GPA ≥ 2.0
- Completion of ≥ 120 credit hours
- Completion of two writing intensive courses
- Completion of all general education requirements including coursework in the following knowledge domains:

  - Written communication (6 Cr.)
  - Oral communication (3 Cr.)
  - Mathematical Sciences (3 Cr.)
  - Natural Sciences (6 Cr.)
  - Humanities and Fine Arts (9 Cr., from at least two different disciplines , with a limit of 3 Cr. of performance courses)
  - Social and Behavioral Sciences (6 Cr.)

Candidates for bachelor's degrees must complete the appropriate curriculum and required activities listed in this catalog as well as be recommended for graduation by the faculty in the School of Arts and Sciences.

PROFESSIONAL POLICIES AND INFORMATION

Admission into the Professional Program

Holistic Application Review

The School of Pharmacy will begin a holistic application review for all new P1 transfer applicants entering the professional program in fall 2018 and thereafter. Students enrolled in undergraduate coursework at the College who intend to enter the professional program will not be subject to the holistic review process until the fall 2020 Professional Year 1 cohort. Admission into the professional program (P1 year) is based on the following, but not limited to, academic and nonacademic requirements.

Academic Requirements

TERM OF ENTRY INTO THE PROFESSIONAL PROGRAM	STLCOP UNDERGRADUATE STUDENTS ENTERING THE PROFESSIONAL PROGRAM	NEW P1 TRANSFER APPLICANTS APPLYING FOR ADMISSION TO THE PROFESSIONAL PROGRAM
Fall 2019	Before entry into the professional program (P1 year), students must have: • an undergraduate cumulative GPA of 2.7 or higher (earned at the College) • no grades below a C- in prerequisite courses*	Before entry into the professional program (P1 year), students are recommended to have: • an undergraduate cumulative GPA of 2.7 or higher • a core math and science GPA of 2.7 or higher • no grades below a C- in prerequisite courses*
Fall 2020	Before entry into the professional program (P1 year), students are recommended to have: • an undergraduate cumulative GPA of 2.7 or higher • a core math and science GPA of 2.7 or higher • no grades below a C- in prerequisite courses*	Before entry into the professional program (P1 year), students are recommended to have: • an undergraduate cumulative GPA of 2.7 or higher • a core math and science GPA of 2.7 or higher • no grades below a C- in prerequisite courses*

**Refer to P. 15 for a full list of prerequisite courses*

Nonacademic Requirements
In addition to successful completion of prerequisite courses and meeting the academic requirements, students must successfully complete an interview and writing assessment.

Interview
Students currently enrolled in undergraduate coursework at the College will receive their interview schedules before the end of the fall semester. Interviews will be conducted during winter break, between the fall and spring semesters. P1 transfer student applicants may also be interviewed at this time, as well as later throughout the semester as applications are processed. All travel related expenses are the responsibility of the applicant.

Students who are unable to attend their scheduled interview must contact the Office of the Dean of Pharmacy at least two weeks before the interview date. Absence due to illness or other emergencies requires immediate notification. Students who are late or absent without notifying the Office of the Dean of Pharmacy may be disqualified from consideration for progression or admission into the professional program.

Writing Assessment
Students will be required to demonstrate minimum acceptable writing proficiency through a writing assessment administered by the College. The Pharmacy College Admissions Test (PCAT) writing section results may be used in place of the College's writing assessment.

Pharmacy College Admissions Test (PCAT)
P1 transfer applicants and progressing students who will complete less than three full-time fall or spring semesters at the College will be required to take the PCAT.

Decision Appeals
Students who are denied entry into the professional program due to academic or nonacademic performance may submit a written response to the School of Pharmacy Admissions and Progressions Committee presenting additional information to the committee for reconsideration. The decision of the School of Pharmacy Admissions and Progressions committee will be final.

Professional Program Ability Outcomes (School of Pharmacy)

The following general outcomes and professional roles pertain to the professional program (i.e., Professional Years 1–4) implemented in fall 2016.

- **Critical Thinking:** The graduate systematically explores and analyzes issues, assumptions, evidence, ideas and events before accepting opinions or formulating conclusions.
- **Problem-Solving:** The graduate identifies problems and potential approaches for solving them and designs, implements and evaluates effective and appropriate strategies to arrive at viable solutions.
- **Creative and Innovative Thinking:** The graduate thinks and works in a manner characterized by imagination, innovation, divergent thinking and risk taking.
- **Written Communication:** The graduate writes clearly and effectively to diverse audiences for a variety of purposes.
- **Oral Communication:** The graduate enhances shared understanding by listening to, interpreting, developing and expressing ideas, verbally and nonverbally, in oral formats, across a range of technologies and for a variety of purposes and audiences.
- **Valuing and Ethical Decision-Making:** The graduate makes decisions about personal and professional conduct through a process that relates values to ideas, actions and consequences and uses clearly defined ethical principles.
- **Self-Awareness and Foundational Skills for Lifelong Learning:** The graduate exhibits intellectual curiosity, is self-aware, takes responsibility for developing knowledge, skills, attitudes, values and habits and conducts regular self-assessments to develop and enact a plan to improve performance, adapt to change and promote continuous personal and professional growth.
- **Conceptual Understanding of Scientific and Mathematical Principles:** The graduate develops, manages and applies a scientific and mathematical knowledge base to evaluate information in a variety of contexts. This ability may be expressed when a student is asked to extrapolate trends and

patterns from existing data, explain social, natural or behavioral phenomena and predict probable outcomes.

- **Integrative Learning:** The graduate makes connections among ideas, bodies of knowledge and experiences to synthesize and transfer learning to new, complex situations.
- **Social Awareness and Cultural Sensitivity:** The graduate demonstrates self-knowledge and empathetic understanding of others, makes decisions informed by historical, aesthetic, cultural, social, behavioral, economic, political and global contexts and works responsibly and effectively with diverse populations.
- **Collaboration:** The graduate contributes to team tasks and responsibilities, facilitates participation of group members, fosters a constructive climate and manages and resolves conflict to strengthen overall cohesiveness and effectiveness.
- **Civic Engagement:** The graduate works to make a difference in their community.
- **Information Literacy:** The graduate determines the extent of information needed and identifies, locates, retrieves, evaluates and effectively and responsibly uses and shares that information to accomplish a specific purpose.

To successfully serve in the following professional roles, the integration of general ability outcomes is essential.

- **Patient-Centered Caregiver:** Provide patient-centered care as the medication expert utilizing sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic and professional issues, technologies and evolving pharmaceutical, biomedical, sociobehavioral and clinical sciences that may impact therapeutic outcomes.
- **Medication-Use Systems Manager:** Addresses patient health care needs using human, financial, technological and physical resources to optimize the safety and efficacy of medication-use systems.
- **Population-Based Care Provider:** Design prevention, intervention and educational strategies for communities to manage chronic disease, improve health and wellness, and describe how population-based care influences patient-centered care and influences the development of practice guidelines and evidence-based best practices.
- **Patient and Professional Advocate:** Promote the best interests of the patient, community and profession.

Technical Standards

Listed below are recommendations and information regarding the characteristics and abilities which St. Louis College of Pharmacy believes are important for student pharmacists to possess in order to be successful in the pharmacy curriculum and in subsequent practice as a pharmacist.

Any student pharmacist who has concerns that a disability may impact their ability to complete the program should contact the assistant director of academic support and coordinator of disability support services. Student pharmacists who lack certain characteristics and abilities which are related to a documented disability, may request St. Louis College of Pharmacy to provide reasonable accommodations. Reasonable accommodations are defined as services provided to individuals with disabilities, medical conditions or temporary injury or condition that removes or lessens the effect of disability-related barriers. Examples include providing sign language interpreters, furnishing written materials in large print, and making a facility or event physically accessible. Some individuals with disabilities may need reasonable accommodations to meet the Technical Standards, while others may not. The absence of some skills may lengthen the time to completion of the Doctor of Pharmacy (Pharm.D.) program and limit the variety of settings in which a student pharmacist or pharmacist can work. For more information on the College's compliance with the Americans with Disabilities Act (ADA), please refer to the Student Handbook or the ADA Program information on the College website.

The standards detailed below are derived from a variety of sources specific to pharmacy education and the practice of pharmacy. These sources include:

- Code of Ethics for Pharmacists
- Oath of a Pharmacist

- Pledge of Professionalism
- Accreditation Council for Pharmacy Education (ACPE) Accreditation Standards 2016
- Student Code (Professionalism Plan)

St. Louis College of Pharmacy has a responsibility to the public to assure that its graduates become fully competent pharmacists. It is imperative that persons admitted possess each of the five key categories (psychomotor abilities, communication, cognitive abilities, behavioral and social attributes, and ethical values) necessary to practice pharmacy. Each key category is defined, and specific examples related to the pharmacy curriculum and the practice of pharmacy are noted. In the event of deteriorating physical, behavioral, social or emotional abilities, student pharmacists may require counsel with school and college officials if there is evidence that they are not meeting the technical standards. Student pharmacists whose actions or decisions pose a danger to themselves, patients and colleagues may not continue in the program unless they agree to accept professional help under conditions acceptable to the School of Pharmacy. Revealed deficiencies of a current student pharmacists' ability to perform the Technical Standards may create barriers that could prevent the student pharmacist from continuing in the professional program at St. Louis College of Pharmacy.

Psychomotor Abilities
Use of the body associated with mental activity. During the curriculum, student pharmacists will be asked to:

- Observe lectures, demonstrations and experiments
- Use a computer for course-based activities
- Visually evaluate microscopic slides, pharmaceutical preparations and instrumentation data
- Observe a patient accurately at a distance and close at hand in settings such as an ambulatory care exam room, hospital room, operating room, etc. where blood and other bodily fluids may be present
- Perform basic life support (BLS)
- Demonstrate safe, sterile technique
- Prepare drug products (compound drug products, prepare IVs, and make capsules)
- Perceive the signs of disease or adverse drug effects through visual observation
- Perform physical exams using touch (e.g. use a stethoscope, take a pulse, perform a foot exam, etc.)
- Perform and demonstrate point-of-care testing (e.g. fingerstick of yourself and others)
- Administer immunizations

Communication
Imparting or interchange of thoughts, opinions, or information by speech, writing or signs. During the course of the curriculum, student pharmacists will be asked to:

- Communicate effectively in the English language
- Document activities
- Speak, listen and read in order to elicit information (patient history, medication use, etc.)
- Effectively communicate with instructors, peers and patients
- Communicate with other health care providers
- Teach patients how to use health care related devices (inhalers, glucometers, etc.)
- Provide patients with clear, concise, accurate and audience-appropriate information
- Organize ideas and develop thoughts into coherent, appropriately written and referenced essays and research papers
- Interpret non-verbal communication (body language) from peers, patients, instructors and members of a health care team
- Utilize appropriate resources for communication with non-English speakers

Cognitive Abilities
Mental processes of perception, memory, judgment and reasoning. During the course of the curriculum, student pharmacists will be asked to:

- Accurately fill prescriptions
- Solve problems involving measurement, calculations, reasoning, analysis, synthesis and evaluation
- Gather and evaluate information from multiple sources to develop patient treatment and monitoring plans in a timely manner
- Demonstrate evidence-based decision-making
- Synthesize knowledge and integrate relevant information

Behavioral and Social Attributes
Characteristics of experience, behavior and interaction with people. During the course of the curriculum, student pharmacists will be asked to:

- Possess virtues such as honesty, integrity, altruism and dedication
- Place the welfare of their patients before all else
- Display attitudes such as empathy, care, compassion and social responsibility regardless of the age, race, creed, color, national origin, gender, sexual orientation, disability, marital status, disabled veteran or Vietnam era veteran status
- Promote confidence in their profession by exemplifying professional demeanor, respect and dignity in all interactions
- Demonstrate and achieve the values and goals of the three pillars of professionalism within the Student Code: Competence, Connection and Character
- Identify personal reactions and responses, recognize multiple points of view and integrate these appropriately into clinical decision-making
- Exhibit emotional stability and sufficient physical health to be able to perform in physically, intellectually and emotionally challenging workloads
- Function effectively under stress and adapt to an environment which may change rapidly without warning and in unpredictable ways

Ethical Values
Act in a manner that is right or moral. During the course of the curriculum, student pharmacists will be asked to:

- Demonstrate a professional demeanor, conduct and behavior that are appropriate to their standing in the professional program
- Protect the confidentiality of any and all patient information in their professional and personal communications
- Meet the ethical standards set forth in the Code of Ethics for Pharmacists
- Obtain and maintain a valid Pharmacist Intern license in the State of Missouri and pass a criminal background check, drug tests and screens, immunization and tests, and trainings required by the Missouri Board of Pharmacy rules, Missouri law and St. Louis College of Pharmacy affiliated experiential sites and their accrediting and regulatory agencies

Attendance Policy for School of Pharmacy

The School of Pharmacy expects student pharmacists to be present for activities noted as required according to the course schedule or syllabus. Student pharmacists are also expected to be present for all course-related assessments (e.g., exams, quizzes, case presentations, practicums, etc.). This is necessary to allow for efficient and effective teaching of the course material and for active learning during class sessions, as well as to show respect for instructors and to ensure the security of examinations, quizzes and other types of student assessments. However, the School of Pharmacy also recognizes that there are occasions when a student pharmacist's attendance at these activities is not possible or prudent.

The School of Pharmacy Excused Absence Policy, found in the appendix of this document, informs P1-P3 student pharmacists on what an excusable absence is and how excused absence requests and approvals are processed. All P1, P2 and P3 student pharmacists who are requesting an excused absence from a professional program course should submit their request in writing via email to the Office of the Dean of Pharmacy using the following email address: deansoffice@stlcop.edu.

Note: Introductory pharmacy practice experiences (IPPE) courses taken during the fall and spring semesters will follow the Excused Absence Policy. Professional Year 4 (P4) student pharmacists on advanced pharmacy practice experiences (APPE) and P2 and P3 student pharmacists completing IPPEs for community and health system must follow the excused absence policy in the Office of Experiential Education Manual and Policies.

Concentrated Experiential Course Withdrawal Policy

Concentrated experiential courses include the introductory pharmacy practice experiences (IPPE) that occur over the summer or winter break and the advanced pharmacy practice experiences (APPE) in the last professional year. Only in cases of significant

extenuating circumstances, students may withdraw from a concentrated experiential course prior to 20% of the total rotation time elapsing, with approval from the course coordinator and the director of the Office of Experiential Education. This is day five for an APPE and day three for a concentrated IPPE. After 20% of the rotation has been completed, withdrawals may only be permitted for significant extenuating circumstances with approval from the Office of the Dean of Pharmacy. Students cannot drop APPE or IPPE rotations.

Students must complete the Experiential Course Withdrawal Form, obtain the signatures of both the course coordinator and director of the Office of Experiential Education, and submit it to the Office of the Registrar. If approved, the course coordinator and director of the Office of Experiential Education will determine rescheduling possibilities. In some circumstances, withdrawals in the P4 year may delay graduation.

Repeating or Retaking Courses

When a course is repeated or retaken at the College, the grade earned will replace the initial grade, even if that grade is lower than the initial grade. If a student repeats a required course in years P1 through P3, the grade received in that course must be a letter grade of C- or better or the student is subject to academic dismissal.

Students entering the professional program prior to the fall semester of 2017 may have only two course grades lower than C- in required courses in Professional Years 1-3 and, therefore, may choose or be required to repeat a course. Students entering the professional program in fall 2017 or thereafter may not have any grades lower than C- in required courses (Professional Years 1-3). For students to enroll in a course, a grade of C- or greater must be earned in all prerequisite courses. Grades less than C- earned in required courses that are not prerequisites for a subsequent course must be remediated or repeated at the earliest opportunity.

For students in the last year of the professional program, the following policy will apply for all grades below C:

- If a student fails one rotation, they will be placed on an academic leave of absence and are required to successfully complete a remediation plan before being allowed to continue on rotations. A return date will be scheduled prior to beginning remediation, but may be adjusted in accordance with the student's improvement plan progress.
- Remediation will consist of an individualized improvement plan. Plans will be developed by the Course Coordinator, Director of the Office of Experiential Education, and Chair of Department of Pharmacy Practice with input from the Dean of the School of Pharmacy as needed. Plans will be determined based on areas that need significant development to provide the student additional support (academic or personal) to ensure their success on subsequent rotations.
- Students will be required to demonstrate successful completion of the required components of the plan in order to return to rotations. Successful remediation will vary in length based on the student's needed development and ability to demonstrate sufficient readiness to resume. Remediation could include, but not limited to, auditing all or part of a course, independent study, skills-based competencies, top-drugs/NAPLEX review, assignment practice, counseling, life organization skills, etc.
- The Director of the Office of Experiential Education, Chair of Department of Pharmacy Practice, and Dean of the School of Pharmacy will determine that the student satisfactorily completed the terms of remediation. Successful remediation will not change the failed rotation grade and is required to be eligible to repeat the failed rotation. A student that has failed one rotation must repeat the same rotation type with a new site and preceptor.
- If a student fails a second rotation (of the same or different type), they are eligible for dismissal.
- Failure of any rotation could result in scheduling changes and delayed graduation.

Remediating and Reevaluating Courses

Some courses in the professional program provide an opportunity for remediation and reevaluation. In these courses, students who do not meet course competency standards as defined in the course syllabus may qualify for remediation and reevaluation of the course instead of needing a full repeat or retake of the course the

next time the course is normally offered. Students who qualify for remediation and reevaluation in a course will be issued a remediation pending (RP) until the remediation and reevaluation process is completed. If the remediation and reevaluation is successfully completed, the RP will be replaced with the appropriate course grade. If remediation and reevaluation is not successfully completed, the RP will be replaced with the appropriate grade and the student will be required to repeat or retake the course in its entirety the next time it is normally offered, or the student may be subject to academic probation or dismissal if the resultant course grade contributes to any of the possible reasons for academic probation or dismissal as outlined in the Professional Program Probation and Professional Program Dismissal Policies below. As variation may exist between courses, please refer to course syllabi for the remediation and reevaluation policy and process used in the course.

Progression within the Doctor of Pharmacy (Pharm.D.) Program

Students completing the undergraduate program at St. Louis College of Pharmacy and students transferring directly into the first professional year must complete all prerequisites for admission to the professional program. To progress through the professional program:

- All students must demonstrate competency on high yield medications (i.e., "top drugs") knowledge. To ensure student competency, top drugs proficiency exams will be administered at the end of each semester (spring P1 through spring P3). End of semester proficiency exam dates (including remedial exam dates) will be scheduled at the beginning of the semester. Students must take the end-of-semester proficiency exam (and remedial exams, if needed) on the day it is scheduled. If a student does not demonstrate proficiency on the end-of-semester exam, they are responsible for self-learning the exam material and then retaking the exam on the next scheduled date. Students will not be allowed to progress to IPPE courses in the next professional year or APPE courses until proficiency is achieved. Students who are unable to demonstrate proficiency on any end-of-semester proficiency exam after three attempts must meet with the Office of the Dean of Pharmacy before retaking the test.
- All students must pass a pharmacy calculations proficiency assessment in their last didactic semester prior to advanced pharmacy practice experiences (APPE). Failure to meet the proficiency standard will require remediation and delay the start of APPE courses.
- A cumulative professional program GPA ≥ 2.0 is required before entering APPE courses in Professional Year 4.
- Students in Professional Years 1-3 may not have any grades lower than C- in required courses. Students will be required to remediate or repeat a course to progress (excludes students who entered the professional program prior to fall 2017).
- Students in Professional Year 4 may not have any grades lower than C in APPE rotations. Students will be placed on an academic leave of absence while completing a remediation plan. After successful completion of the remediation plan, the rotation must be repeated with a new preceptor.
- All students in the Doctor of Pharmacy program must maintain a current Missouri pharmacy intern license throughout the program. In addition, any experiential education completed outside of Missouri will require appropriate pharmacy licensure based on requirements outlined by those states and countries. Students must meet the requirements as outlined in the Experiential Education Guidelines for immunizations, annual screenings and certifications.

For students in the Doctor of Pharmacy program, the College coordinates domestic and international professional liability insurance coverage for students in their P1–P4 years. All students are required to adhere to the requirements outlined for both domestic and international professional liability insurance coverage. See Page 19 to review more detailed information.

Cocurricular Requirements

Students in the professional program are required to participate in cocurricular activities to help foster their professional development. Students entering the professional program starting fall 2016 are required to show competency by graduation in four cocurricular outcomes: self-awareness and foundational skills for lifelong learning, creative and innovative thinking,

civic engagement and social awareness and cultural sensitivity. Practice opportunities for these outcomes are provided through required and elective activities. Student progress related to these outcomes is supported and monitored through the faculty advising program.

Pharmacy Curriculum Outcomes Assessment (PCOA)
As stipulated by the Accreditation Council for Pharmacy Education (ACPE), all accredited pharmacy schools in the U.S. are required to administer the Pharmacy Curriculum Outcomes Assessment (PCOA) to their students before students start APPE courses. All P3 students are required to take the PCOA exam during the P3 year (specific exam date to be determined each year). Students who do not meet minimum performance expectations on the PCOA exam may be required to complete a remediation process.

Academic Probation and Dismissal

In accordance with Title IV regulations, a student attending St. Louis College of Pharmacy is required to remain in good academic standing and maintain satisfactory academic progress. Students are urged to read the following information carefully to be sure they know which policies pertain to them.

The following academic probation and dismissal policies apply to all students who entered the professional program in fall 2016.

Professional Program Probation Policy
A student who is not in good academic standing will be placed on academic probation for the following reasons:

- Student earns a cumulative professional program GPA less than 2.00.

Academic probation requires that a student's cumulative professional program GPA at the end of the probation period (one semester) is equal to or greater than 2.00.

Professional Program Dismissal Policy
A student will be subject to academic dismissal from the College for the following reasons:

- Student fails to meet probation requirements (if on probation from the previous semester).
- Student earns a grade less than C- when repeating a required course.
- Student fails to receive a passing grade in at least 12 credit hours per semester (fall and spring) except under extenuating circumstances.
- Student earns a third grade below C- in a required course in years P1-P3.
- Student is placed on academic probation for a second time in years P1-P3.
- Student fails a second APPE rotation (of the same or different type).

The procedures for appealing an academic dismissal are outlined in the Student Code.

The following academic probation and dismissal policies apply to all students who entered the professional program during fall 2017 or thereafter.

Professional Program Probation Policy
A student who is not in good academic standing will be placed on academic probation for the following reasons:

- Student earns a semester professional program GPA less than 2.00.

Academic probation requires that a student's semester professional program GPA at the end of the probation period (one semester) is equal to or greater than 2.00.

Professional Program Dismissal Policy
A student will be subject to academic dismissal from the College for the following reasons:

- Student fails to meet probation requirements (if on probation from the previous semester).
- Student earns a grade less than C- when repeating a required course.
- Student fails to receive a passing grade in at least 12 credit hours per semester (fall and spring) except under extenuating circumstances.
- Student is placed on academic probation for a second time in years P1-P3.
- Student fails a second APPE rotation (of the same or different type).

The procedures for appealing an academic dismissal are outlined in the Student Code.

Completion of the Doctor of Pharmacy (Pharm.D.)

The Doctor of Pharmacy (Pharm.D.) is earned upon satisfactory completion of all Pharm.D. requirements. The professional program is four academic years. Requirements include:

- Satisfactory completion of all required coursework in Professional Year 1 through Professional Year 4 (130 semester hours)
- A minimum of nine semester hours of electives (one of which must be a professional writing emphasis elective) and three semester hours of a capstone selective
- Successful completion of all cocurriculum requirements
- A cumulative professional program GPA ≥ 2.0 GPA
- A grade of C- or better in all required Professional Year 1 through Professional Year 3 coursework (excludes students who entered the professional program before fall 2017)
- A grade of C or better in each advanced pharmacy practice experience in Professional Year 4

Finally, candidates for the Doctor of Pharmacy must be recommended for graduation by the faculty in the School of Pharmacy, must be present at commencement exercises (unless excused by the Office of the Dean of Pharmacy) and must have paid all fees and obligations to the College.

Students in the professional program are also required to participate in cocurricular activities to help foster their professional development. Required yearly activities include, but are not limited to, Professional Orientation which includes various workshops, American Pharmacists Association Immunization certificate training and basic life support training. Students in the first and second professional years of the program are required to attend either Missouri or Illinois Legislative Day to fulfill their annual Outreach and Advocacy Day requirement.

In addition to the cocurricular requirements above, professionalism concepts will be taught in various courses. St. Louis College of Pharmacy aims to help students develop as professionals and value the professional habits expected of a pharmacist. Professionalism consists of an individual's competencies, virtues, attitudes and behaviors appropriate to a profession. A profession is distinguished from other work by the nature of the relationships between professionals and the people for whom they care and serve.

Pharmacists have covenantal relationships with their patients. That is, they are obligated to put the best interests of their patients ahead of their own. Pharmacists must be trustworthy. To earn the trust of the patients, pharmacists must operate upon values such as responsibility, a dedication to service, commitment to excellence and collaboration. They must be competent in the knowledge and skills that are required for their profession and must be dedicated to maintain that competency throughout their careers.

Pharmacists must possess virtues such as honesty, integrity and altruism and must display attitudes such as empathy, care, compassion and social responsibility. Finally, pharmacists should promote confidence in their profession by exemplifying professional demeanor in all interactions.

Also, students will be able to develop professionally via extracurricular activities and will receive guidance from their professional program advisor in all of these curricular, cocurricular and extracurricular experiences. All students in the professional program will be held accountable for, and graded on, professionalism in every course in the experiential curriculum. Unprofessional incidents on or off campus will not be tolerated and will be subject to review by the Student Conduct Board.

Requirements for State Licensure

To practice pharmacy, one must become licensed as a pharmacist in the state in which they wish to practice. Licensure means that the candidate has met the eligibility requirements for licensure and successfully passed an examination.

Most states' eligibility requirements include graduation from an accredited school or college of pharmacy and completion of a specific number of hours of practical experience under the supervision of a pharmacist. Since these requirements are not uniform from state to state, students should obtain information regarding state licensure, examination and practical experience requirements from the board of pharmacy in the state in which they plan to be licensed.

The pharmacist licensure exam consists of two parts. Part one is a standardized, computer-based exam known as North American Pharmacist Licensure Examination (NAPLEX). NAPLEX is administered through the state board of pharmacy and consists of questions drawn from all aspects of pharmacy. Part two is the Multistate Pharmacy Jurisprudence Examination (MPJE), a test on the federal and state laws that affect pharmacy. Both NAPLEX and MPJE are administered at specific testing centers across the country. For information about these exams, students should contact the board of pharmacy in the state in which they plan to be licensed and consult the National Association of Boards of Pharmacy (NABP) website.

Once licensed, the pharmacist can reciprocate this license to most states.

SCHOOL OF ARTS AND SCIENCES

Bachelor's Degrees

Throughout the academic program, advising services and career support and information are available to help students select which bachelor's degree to pursue that is consistent with their interests, skills and career aspirations.

The following policies pertain to declaring and completing a bachelor's degree program at St. Louis College of Pharmacy:

- Students will declare their interest in one of the available bachelor's degree programs on the application to the College.
- By the end of the spring semester of the sophomore year, students will formally declare the bachelor's degree program they want to complete. Students who transfer directly into the junior year must formally declare upon admission the bachelor's degree program they want to complete.
- Students may earn only one bachelor's degree at the College. Students may switch bachelor's programs if desired, but should understand that this may lengthen the time required to complete an undergraduate degree. Students who opt to switch bachelor's programs must have a written plan in place that is approved by their academic advisor. The plan must articulate how the student will successfully complete all degree requirements.
- Students transferring into the undergraduate program must complete 48 credit hours at the College and complete all requirements of the bachelor's program to earn an undergraduate degree from the College.
- Transfer students entering Professional Year 1 are not typically eligible to earn a bachelor's degree from the College. In special cases, a student may seek permission from the Office of the Dean of Arts and Sciences to pursue a Bachelor of Science from the College.
- Students may pursue an integrated Bachelor of Science in Pharmaceutical Sciences, with the intent to apply for progession into the professional program. Students who wish to only pursue their bachelor's degree at the College may make this decision at any time, but this decision is typically final (i.e., students may not opt back into the Pharm.D. program.)

Biomedical Sciences (B.S.)
The Bachelor of Science (B.S.) in Biomedical Sciences program is the study of applied biology related to health and disease and will prepare students for pre-professional and clinical science careers. Graduates of this program will be qualified to apply for admission to graduate programs in the sciences or colleges or schools in the medical field. Graduates who wish to enter the workforce rather than move on to a more advanced degree will be qualified to work as laboratory assistants and technicians, or work in other fields that require training in the sciences.

A degree in biomedical sciences includes intensive study of the biological and physical sciences and how they relate to the health field. This program provides the foundational knowledge and skills for health care scientists and professionals to understand the biology associated with homeostasis of the human body, and how exogenous molecules can exert a physiological effect. The program provides students a curriculum in biology, chemistry, mathematics and physics and gives them the ability to also pursue specific courses in areas that are required and suggested for given career tracks. This combination of core and elective courses will enhance student acquisition of key skills in the biological and chemical sciences while reinforcing critical thinking and problem-solving skills as applied to biomedical research and sciences.

The following courses are required in the major:

- BIOL 1111 Introductory Biology I (4 Cr.)
- BIOL 1112 Introductory Biology II (4 Cr.)
- BIOL 2220 Human Anatomy (4 Cr.)
- BIOL 2231 Human Physiology (4 Cr.)
- BIOL 2250 Genetics (3 Cr.)
- BIOL 3240 Microbiology (4 Cr.)
- BIOL 3310 Cell Biology (3 Cr.)
- BIOL 4310 Biology Seminar (1 Cr.)
- BIOL 4450 Molecular Biology and Genetics (4 Cr.)
- Advanced Biology Selectives (15 Cr.)

The following courses are required outside the major:

- CHEM 1111 Chemical Structure and Physical Properties (CHEM 1) (4 Cr.)
- CHEM 1212 Chemical Structure and Reactivity (CHEM 2) (4 Cr.)
- CHEM 2213 Organic Chemistry with a Biological Emphasis (CHEM 3) (4 Cr.)
- CHEM 2314 Fundamentals of Chemical Quantitative Analysis (CHEM 4) (4 Cr.)
- CHEM 3320 Biochemistry (CHEM 5) (4 Cr.)
- MATH 1110 Applied Calculus for Health Professionals (3 Cr.)
- MATH 1120 Statistics for the Health Sciences (3 Cr.)
- PHYS 3211 Physics I (4 Cr.)
- PHYS 3212 Physics II (4 Cr.)
- PSYC 2210 Principles of Psychology (3 Cr.)
- SEMR 1100 Foundations of Learning (2 Cr.)
- SOCI 2210 Principles of Sociology (3 Cr.)

Students who choose to seek entry into the Doctor of Pharmacy program after completion of this degree will need to take the following courses as part of their electives to meet pharmacy prerequisites for entry:

- ECON 3200 Microeconomics with a Health Care Emphasis (3 Cr.)
- PHAR 1102 Introduction to Health Care (2 Cr.)

Global Health (B.A.)

The Bachelor of Arts (B.A.) in Global Health program prepares students to understand and evaluate global health issues while becoming health professionals with international competencies. The global health program merges scientific and humanistic disciplines with unique perspectives on health systems. Students who select this major will gain extensive knowledge on health issues impacting people around the world and will be equipped to solve problems in order to improve patient care. Students will engage in academic research and prepare for careers in diverse fields. A senior capstone experience will allow students to complete a project in which they apply their skills and knowledge.

The following courses are required in the major:

- COMM 3300 Intercultural Communication (3 Cr.)
- COMM 3310 Communications for Health Behavior Change (3 Cr.)
- ECON 3200 Microeconomics with a Health Care Emphasis (3 Cr.)
- GLBH 1100 Introduction to Global Health (3 Cr.)
- Global Health Selectives (21 Cr.)
- *Health and the Environment (3 Cr.)
- *Health Systems in Developing Countries (3 Cr.)
- HIST 3303 Global Heritage III (3 Cr.)
- HIST 3320 Global Public Health (3 Cr.)
- *HIV/AIDS and Societies (3 Cr.)
- *Maternal and Child Health (3 Cr.)
- *Poverty and Global Health (3 Cr.)
- *Risk Management Communication (3 Cr.)
- SOCI 3320 Health, Biomedicine and Society (3 Cr.)
- Additional Experiential Hours (12 Cr.)
  - *Internship or Service Learning or Liberal Arts Independent Study (6 Cr.)
  - *Capstone Project (6 Cr.)

The following courses are required outside the major:

- BIOL 1111 Introductory Biology I (4 Cr.)
- BIOL 1112 Introductory Biology II (4 Cr.)
- COMM 3200 Health Care Communication (3 Cr.)
- HIST 2201 Global Heritage I or HIST 2202 Global Heritage II (3 Cr.)
- MATH 1120 Statistics for the Health Sciences (3 Cr.)
- PSYCH 2210 Principles of Psychology (3 Cr.)
- SEMR 1100 Foundations of Learning (2 Cr.)
- SOCI 2210 Principles of Sociology (3 Cr.)

*course code to be determined

Medical Humanities (B.A.)
The Bachelor of Arts (B.A.) in Medical Humanities prepares its graduates to become interdisciplinary thinkers who can nimbly adapt to a rapidly changing modern world that is growing increasingly more complex, diverse and global in scope. This program's graduates will have the transferable skills twenty-first century employers seek including critical thinking, problem-solving and communication skills, all of which are the gateway to many careers in health care, public health, education, business, social work and other fields. Graduates will be prepared to successfully compete for admission to graduate and professional programs including: education, law, business and many graduate programs in the humanities and social sciences.

Students completing this degree program, but not applying to graduate and professional programs, may seek employment as policy analysts, researchers and junior executives in governmental or nongovernmental organizations or as junior executives in the private sector where employers seek graduates who have "learned how to learn." For example, this degree could lead to a career as an officer in the military or as a junior executive in a corporation.

The degree program offers two emphases: Health Care Communication or Interdisciplinary Studies. The health care communication emphasis allows students to take extra coursework that focuses on how effective communication can improve patient care. The interdisciplinary studies emphasis gives students greater flexibility to have a broader exploration of humanities coursework in fields such as history or literature.

The following courses are required for the major regardless of emphasis chosen:

- ARTS 1100 Introduction to Art History (3 Cr.)
- HIST 2201 Global Heritage I (3 Cr.)
- HIST 2202 Global Heritage II (3 Cr.)
- HIST 3303 Global Heritage III (3 Cr.)
- *Liberal Arts Internship or Liberal Arts Independent Study (6 Cr.)
- Literature Selective (3 Cr.)
- MHUM 3301 Liberal Arts Theory Seminar (3 Cr.)
- MHUM 4402 Liberal Arts Research Seminar (3 Cr.)
- MHUM 4403 Liberal Arts Capstone Project (3 Cr.)
- MUSI 1100 Introduction to Music (3 Cr.)
- PSYCH 2210 Principles of Psychology (3 Cr.)
- SEMR 1100 Foundations of Learning (2 Cr.)
- SOCI 2210 Principles of Sociology (3 Cr.)

The following courses are required to complete the emphasis in Health Care Communication:

- COMM 3200 Health Care Communication (3 Cr.)
- COMM 3300 Intercultural Communication (3 Cr.)
- COMM 3310 Communications for Health Behavior Change (3 Cr.)
- 300- or 400-level History Selective (3 Cr.)
- *mHealth, eHealth, and Media (3 Cr.)
- *Organizational Communication (3 Cr.)
- *Risk Management Communication (3 Cr.)
- SOCI 3310 Chronic Illness, Death and Dying (3 Cr.)
- Social Science Selectives (6 Cr. of which 3 Cr. must be 300- or 400-level)

The following courses are required to complete the emphasis in Interdisciplinary Studies:

- 300- or 400-level History Selectives (12 Cr.)
- Social Science Selectives (24 Cr. of which 15 Cr. must be 300- or 400-level)

*course code to be determined

Pharmaceutical Chemistry (B.S.)
The Bachelor of Science (B.S.) in Pharmaceutical Chemistry program is designed for undergraduates who desire to understand how chemistry and biology can work together to improve health outcomes. Graduates of this program will be qualified to apply for admission to graduate programs in the sciences or colleges and schools in the medical field. Graduates who wish to enter the workforce rather than move on to a more advanced degree will be qualified to work as laboratory assistants and technicians or in other fields that require training in the chemical sciences.

This program provides a foundational background in chemistry, the biological sciences, physics and mathematics as well as a broad general education in the

liberal arts and social sciences. Advanced courses in the degree include pharmaceutical chemistry, biochemistry, cheminformatics and programming, chemical analysis, drug design, synthetic chemistry and biotechnology. The combined curriculum culminates in individual research opportunities for students to develop their skills beyond their coursework experiences.

The following courses are required in the major:

- CHEM 1111 Chemical Structure and Physical Properties (CHEM 1) (4 Cr.)
- CHEM 1212 Chemical Structure and Reactivity (CHEM 2) (4 Cr.)
- CHEM 2213 Organic Chemistry with a Biological Emphasis (CHEM 3) (4 Cr.)
- CHEM 2314 Fundamentals of Chemical Quantitative Analysis (CHEM 4) (4 Cr.)
- CHEM 3320 Biochemistry (CHEM 5) (4 Cr.)
- CHEM 3370 Analytical Chemistry and Instrumental Analysis (3 Cr.)
- CHEM 3375 Physical Chemistry (3 Cr.)
- CHEM 3381 Project Based Chemistry Lab I (3 Cr.)
- CHEM 4471 Pharmaceutical Chemistry I (3 Cr.)
- CHEM 4472 Pharmaceutical Chemistry II (3 Cr.)
- CHEM 4473 Pharmaceutical Chemistry Seminar (3 Cr.)
- CHEM 4482 Project Based Chemistry Lab II (3 Cr.)
- Advanced Chemistry Selective (3 Cr.)

The following courses are required outside the major:

- BIOL 1111 Introductory Biology I (4 Cr.)
- BIOL 1112 Introductory Biology II (4 Cr.)
- MATH 1110 Applied Calculus for Health Professionals (3 Cr.)
- MATH 1120 Statistics for the Health Sciences (3 Cr.)
- MATH 1211 Applied Calculus II (3 Cr.)
- PHYS 3211 Physics I (4 Cr.)
- PHYS 3212 Physics II (4 Cr.)
- SEMR 1100 Foundations of Learning (2 Cr.)

Pharmaceutical Sciences (B.S.)
The Bachelor of Science (B.S.) in Pharmaceutical Sciences is designed for students to gain a strong foundation in the basic sciences and liberal arts and prepare for careers in pharmacy or other health care professions. Students who select a major in pharmaceutical sciences will gain a background in chemistry, mathematics and biological sciences. Coursework in these fields is required to seek admission to graduate programs in the sciences and health care and professional programs in pharmacy, dentistry, optometry, veterinary medicine, podiatry and more. Students who select an emphasis in health sciences will also complete the coursework in physics required to pursue graduate and professional study in medicine.

The degree has two options – a Bachelor of Science in Pharmaceutical Sciences with an Emphasis in Health Sciences or Emphasis in Health Humanities. Both emphases allow students to pursue an integrated Doctor of Pharmacy (Pharm.D.) and Bachelor of Science in Pharmaceutical Sciences degree. Other majors at the college can prepare you to enter the pharmacy program, but only this major (either emphasis) is integrated as a seven-year curriculum. The Doctor of Pharmacy (Pharm.D.) with an integrated Pharmaceutical Sciences (B.S.) curriculum consists of an undergraduate program followed by a four-year professional program. Coursework for the first professional year overlaps with coursework required in the senior year of the integrated pharmaceutical sciences program so that students may earn a bachelor's degree while completing the first professional year of the Pharm.D. program.

The following courses, which include all general education requirements, are required for the major regardless of emphasis chosen or if integrated into the Doctor of Pharmacy curriculum:

- BIOL 1111 Introductory Biology I (4 Cr.)
- BIOL 1112 Introductory Biology II (4 Cr.)
- BIOL 2220 Human Anatomy (4 Cr.)
- BIOL 2231 Human Physiology (4 Cr.)
- BIOL 3240 Microbiology (4 Cr.)
- BIOL 4100/4360 Principles of Immunology (2 Cr.) or BIOL 4400 Immunology (3 Cr.)
- BIOL 4101/4432 Medical Physiology (3 Cr.)
- BIOL 4200/4350 Principles of Molecular Biology and Genetics (3 Cr.)

- CHEM 1111 Chemical Structure and Physical Properties (CHEM 1) (4 Cr.)
- CHEM 1212 Chemical Structure and Reactivity (CHEM 2) (4 Cr.)
- CHEM 2213 Organic Chemistry with a Biological Emphasis (CHEM 3) (4 Cr.)
- CHEM 2314 Fundamentals of Chemical Quantitative Analysis (CHEM 4) (4 Cr.)
- CHEM 3320 Biochemistry (CHEM 5) (4 Cr.)
- COMM 3200 Health Care Communication (3 Cr.)
- ECON 3200 Microeconomics with Health Care Emphasis (3 Cr.)
- HIST 2201 Global Heritage I (3 Cr.)
- HIST 2202 Global Heritage II (3 Cr.)
- HIST 3303 Global Heritage III (3 Cr.)
- MATH 1110 Applied Calculus for Health Professionals (3 Cr.)
- MATH 1120 Statistics for the Health Sciences (3 Cr.)
- MGMT 4100/4400 Public Health Fundamentals in Pharmacy (3 Cr.)
- PHAR 1102 Introduction to Health Care (2 Cr.)
- PHIM 4110/4300 Information Mastery I: Evidence-Based Medicine and Informatics (2 Cr.)
- PHRC 4101/4300 Pharmacy Calculations (1 Cr.)
- PHRC 4111/4401 Pharmaceutics I (1 Cr.)
- PHRC 4122/4402 Pharmaceutics II (4 Cr.)
- PHSC 4101/4400 Principles of Drug Action (4 Cr.)
- PSYCH 2210 Principles of Psychology (3 Cr.)
- SEMR 1100 Foundations of Learning (2 Cr.)
- SOCI 2210 Principles of Sociology (3 Cr.)
- WRIT 1101 The Effective Writer (3 Cr.)
- WRIT 1102 The Writer as Advocate (3 Cr.)

The following courses are required to complete the emphasis in Health Humanities:

(22 Cr., including a minimum of 9 credit hours of 300- or 400-level courses)

- PHYS 3200 Principles of Physics (4 Cr.)
- Literature Selective (3 Cr.)
- Social Science Selective (3 Cr.)
- 300- or 400-level Health Humanities Selectives (6 Cr. of which 3 Cr. must be writing intensive)
- Electives (6 Cr.)

The following courses are required to complete the emphasis in Health Sciences:

(23 Cr., including a minimum of 6 credit hours of 300- or 400-level courses)

- PHYS 3211 Physics I (4 Cr.)
- PHYS 3212 Physics II (4 Cr.)
- Literature Selective (3 Cr.)
- Social Science Selective (3 Cr.)
- STEM Selective (3 Cr.)
- Electives (6 Cr.)

SCHOOL OF PHARMACY

Doctor of Pharmacy

In the professional program, students complete 130 hours of required coursework that includes nine semester hours (300 contact hours) of introductory pharmacy practice experiences and 40 semester hours (1,600 contact hours) of advanced pharmacy practice experiences in which students extend their learning from the classroom to various pharmacy practice settings and have opportunities to provide care for diverse patient populations. In addition, 12 semester hours of elective or selective coursework are required. Students who wish to specialize in a specific area of pharmacy practice may select one of several possible elective areas of focus.

The Doctor of Pharmacy (Pharm.D.) with an integrated Pharmaceutical Sciences (B.S.) curriculum consists of the undergraduate Bachelor of Science in Pharmaceutical Sciences program followed by a four-year professional program. Coursework for the first professional year overlaps with coursework required in the senior year of the integrated pharmaceutical sciences program so that students may earn a bachelor's degree while completing the first professional year of the Pharm.D. program.

A minimum total of 242 semester hours (with the Bachelor of Science in Pharmaceutical Sciences with an Emphasis in Health Sciences) or 241 semester

hours (with the Bachelor of Science in Pharmaceutical Science with an Emphasis in Health Humanities) must be completed to earn the Pharm.D. with its integrated Bachelor of Science. The selected bachelor's degree is earned upon satisfactory completion of all bachelor's degree requirements which typically occurs after four academic years of study.

The Doctor of Pharmacy with an integrated Bachelor of Science curriculum integrates liberal arts, sciences and pharmacy education to develop graduates who are prepared to contribute directly to patient care at an entry-level working in collaboration with other health care providers. Graduates will also have the abilities necessary for entry into post-graduate training programs. Graduates will be able to think critically, solve complex problems and communicate effectively to provide high-level, interprofessional patient and population care that is evidence-based, culturally sensitive and includes disease management and promotion of health and wellness. Graduates will also be able to manage medication-use systems to optimize patient safety and system efficacy, advocate for the pharmacy profession and within their communities, apply quality improvement principles to advance the practice of pharmacy including practice models that are economically sustainable, and be consumers of and contributors to research and scholarly works.

The following courses are required in the four-year Doctor of Pharmacy program.

Professional Year 1

- BIOL 4100 Principles of Immunology (2 Cr.) or BIOL 4400 Immunology (3 Cr.)
- BIOL 4101 Medical Physiology (3 Cr.)
- BIOL 4200 Principles of Molecular Biology and Genetics (3 Cr.)
- IPPE 4110 IPPE and IPE: Pop Health and Health Care Teams (1 Cr.)*
- MGMT 4100 Public Health Fundamentals in Pharmacy (3 Cr.)
- PHAR 4112 Introduction to Patient Care (4 Cr.)
- PHIM 4110 Information Mastery I: EBM and Informatics (2 Cr.)
- PHPR 4112 Pharmacy Practice Skills Lab I (1 Cr.)
- PHRC 4101 Pharmacy Calculations (1 Cr.)
- PHRC 4111 Pharmaceutics I (1 Cr.)
- PHRC 4122 Pharmaceutics II (4 Cr.)
- PHSC 4101 Principles of Drug Action (4 Cr.)

Professional Year 2

- IPPE 5123 IPPE: Community Pharmacy (3 Cr.) (completion during summer before P2)
- IPPE 5130 IPPE and IPE: Patient-Based Care and Health Care Teams (1 Cr.)*
- MGMT 5100 Pharmacy Leadership and Change (3 Cr.)
- MGMT 5200 HSM: Financial and Economic Aspects (4 Cr.)
- PHAR 5121 IP: Cardiology (5 Cr.)
- PHAR 5131 IP: Pulmonary (2 Cr.)
- PHAR 5142 IP: Endocrinology (3 Cr.)
- PHAR 5152 IP: Nephrology (3 Cr.)
- PHIM 5122 Information Mastery II: Biomedical Literature Evaluation (3 Cr.)
- PHPR 5121 Pharmacy Practice Skills Lab II (1 Cr.)
- PHPR 5132 Pharmacy Practice Skills Lab III (1 Cr.)
- PHRC 5131 Biopharmaceutics and Pharmacokinetics (3 Cr.)

Professional Year 3

- IPPE 6143 IPPE: Health System Pharmacy (3 Cr.) (completion during summer before P3)
- IPPE 6150 IPPE and IPE: Transitions of Care and Health Care Teams (1 Cr.)*
- MGMT 6100 Pharmacy Law (2 Cr.)
- PHAR 6161 IP: Infectious Diseases (4 Cr.)
- PHAR 6171 IP: Critical Care (2 Cr.)
- PHAR 6181 IP: Hematology/Oncology (2 Cr.)
- PHAR 6191 IP: GI/Liver (2 Cr.)
- PHAR 6202 IP: Neurology/Psychiatry (5 Cr.)
- PHAR 6212 IP: Rheumatology (1 Cr.)
- PHAR 6222 IP: Special Populations (3 Cr.)
- PHIM 6131 Information Mastery III: Clinical Applications (2 Cr.)
- PHPR 6141 Pharmacy Practice Skills Lab IV (1 Cr.)
- PHPR 6152 Pharmacy Practice Skills Lab V (1 Cr.)

Professional Year 4

- APPE 7100 Advanced Pharmacy Practice Experience: Ambulatory Care (5 Cr.)
- APPE 7200 Advanced Pharmacy Practice Experience: General Medicine (5 Cr.)
- APPE 7300 Advanced Pharmacy Practice Experience: Community Care (5 Cr.)
- APPE 7400 Advanced Pharmacy Practice Experience: Health System (5 Cr.)
- APPE 7500 Advanced Pharmacy Practice Experience: Patient Care Selective (5 Cr.)
- APPE 7600 Advanced Pharmacy Practice Experience: Elective I (5 Cr.)
- APPE 7700 Advanced Pharmacy Practice Experience: Elective II (5 Cr.)
- APPE 7800 Advanced Pharmacy Practice Experience: Elective III (5 Cr.)

Electives

- CAPS 6000 Integrated Capstone Selective (3 Cr.)
- Professional electives (9 Cr.) (one writing emphasis required)

*course spans over fall and spring semester

Elective Areas of Focus in the Doctor of Pharmacy Program

Electives in the professional curriculum broaden and deepen students' educational experiences beyond the required courses. In the pharmacy curriculum, electives offer students an opportunity to explore pharmacy-related topics in depth, allowing them to see the complexities of pharmacy practice and related issues. The electives offered in this program should have a meaningful relationship with pharmacy practice and professional outcomes.

As a requirement for graduation, all students are required to complete a minimum of 9 hours of electives (one elective course must have a writing emphasis). A 3-hour capstone selective course is also required in the spring P3 semester.

In the spirit of designing the richest pharmacy curriculum possible, electives in the pharmacy curriculum have areas of focus that allow students to tailor their elective course offerings to their interests.

Clinical Services

The goal of this focus area is to further students' abilities in developing and implementing sustainable clinical services for patients. The electives may include areas such as population-based care, developing and implementing new programs, evaluating impact and measuring quality of services, collaborative practice agreements, and so on. Courses in the clinical services focus area will build upon the foundations addressed in health system management, integrated pharmacotherapy, information mastery and pharmacy practice skills labs.

Community Care

The goal of this focus area is to further students' abilities in the practice of patient-centered care in community and ambulatory care settings. The electives may include areas such as pharmacotherapy, self-care, primary care and patient communication. Courses in the community care focus area will build upon the foundations addressed in health system management, integrated pharmacotherapy, introductory pharmacy practice experiences and pharmacy practice skills labs.

Disease State Management

The goal of this focus area is to further students' abilities to assume responsibility for patient outcomes. The electives may include areas such as advanced pharmacotherapy, professional communication and evidence-based medicine. Courses in the disease state management focus area will build upon the foundations addressed in principles of drug action, integrated pharmacotherapy, information mastery and pharmacy practice skills labs.

Health Care Management and Entrepreneurship

The goal of this focus area is to support economic and managerial approaches to problem-solving in health care. The electives may include areas such as pharmacoeconomics, pharmacoepidemiology, entrepreneurship, personal financial management and pharmacy management. Courses in the health care management and entrepreneurship focus area will

build upon the foundations addressed in health systems management and pharmacy law.

Health System Pharmacy

The goal of this focus area is to further students' abilities in institutional practice (e.g., academic medical centers, community hospitals, long-term care settings, home-health, etc.) The electives may include areas such as pharmacotherapy, practice management, patient safety and outcomes. Courses in the health system pharmacy focus area will build upon the foundations addressed in health system management, integrated pharmacotherapy, introductory pharmacy practice experiences and pharmacy practice skills labs.

Informatics

The goal of this focus area is to provide student pharmacists with an opportunity to gain advanced pharmacy informatics education and training that better prepares them for postgraduate informatics education or training. While all pharmacists need fundamental informatics education, those who wish to pursue a career in pharmacy informatics will need advanced education and training as they will be called upon to devise new and better data and information tools and technologies to evolve and optimize health care delivery. Courses in the informatics focus area will build upon the foundations addressed in the three-semester information mastery sequence courses.

Pharmaceutical Sciences

The goal of this focus area is to help develop the student's use of the scientific method in approaching problems. The electives may include areas such as advanced compounding, phytopharmacy, advanced drug delivery systems and toxicology. Students may also complete independent research projects in this area. Courses in the pharmaceutical sciences focus area will build upon the foundations addressed in principles of drug action, pharmaceutics, biopharmaceutics, pharmacokinetics and integrated pharmacotherapy.

Public Health

The goal of this focus area is to help students view the health care system from a public health viewpoint, as well as a patient-care perspective. The electives may include areas such as pharmacoepidemiology, global infectious disease, underserved populations, public health challenges, health literacy and health promotion. Students may also complete independent research projects in this area. Courses in the public health focus area will build upon the foundations addressed in public health fundamentals in pharmacy and introductory pharmacy practice experiences.

Research

The goal of this focus area is to expand students' knowledge of research principles. Courses in the research focus area will build upon the foundations addressed in pharmacy practice, pharmaceutical sciences, information mastery and pharmacy administrative sciences. Students may also complete independent research projects in this area.

COURSE DESCRIPTIONS

CATEGORIES

300- or 400-level courses:

Undergraduate courses with a number designation where the second number of the course code is a 3 or 4 (e.g. CHEM 2314, SOCI 3320, and LITR 3310.)

Elective:

An elective course is any course that a student can take to meet general credit requirements for graduation.

Selective:

A selective is any one of a select number of courses that meets the specific needs of a degree requirement. These courses fall into categories of global health selectives, health humanities selectives, history selectives, literature selectives, science, technology, engineering and math (STEM) selectives, and social science selectives.

Advanced Chemistry Selective (ACS):

The foundational chemistry curriculum (CHEM1-5) is based upon concepts of physical, analytical, organic and biochemistry. An advanced chemistry selective is an in-depth course that expands upon the content of foundational courses, integrates concepts from these courses or applies concepts from these courses in new situations.

Advanced Biology Selective (ABS):

The core biology curriculum is based upon concepts of ecology and evolutionary biology, genetics, microbiology, cellular biology, anatomy and physiology. An advanced biology selective is an in-depth course that expands upon the content of foundational courses, integrates concepts from these courses or applies concepts from these courses in new situations.

Global Health Selective:

A course used to fulfill degree requirements in the global health bachelor's degree. Typically completed during the sophomore, junior and senior years of the program, these courses help students explore various subjects in global health.

Health Humanities Selective:

A 300- or 400-level course in history, literature or the social and behavioral sciences used to fulfill degree requirements in the pharmaceutical sciences with a health humanities emphasis bachelor's degree.

History Selective:

These history courses fulfill requirements in various degree programs. Their primary use is to fulfill requirements in the medical humanities bachelor's degree.

Literature Selective:

A course required in the pharmaceutical sciences bachelor's degree that may also be used to fulfill requirements in various degree programs, especially in the medical humanities bachelor's degree.

Professional Elective:

An elective course that is pharmacy based or enhances the role of a pharmacist. The course broadens or deepens educational experiences beyond required courses for the Doctor of Pharmacy.

Science, Technology, Engineering and Mathematics (STEM) Selective:

The STEM selective is a specific destination for a required selective in the pharmaceutical sciences degree. The STEM selective is a 200-, 300- or 400-level course that expands upon foundational courses in science and math and integrates or applies concepts from these courses in new situations.

Social Science Selective:

Required for the pharmaceutical sciences bachelor's degree, these social and behavioral science courses may fulfill requirements in various degree programs, especially in the medical humanities bachelor's degree.

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Writing Emphasis:

A course which meets the criteria for a professional elective in which writing as a strategy for learning is distributed throughout the semester and is a focus of the course.

Writing Intensive:

A 300- or 400-level undergraduate course designed to include multiple, revisable, assignments which provide students multiple practice opportunities with targeted feedback. These courses help students refine their thinking and writing skills in a particular subject at an advanced level.

COURSE NUMBERS

The four-letter prefix for each course number is as follows:

ARTS = fine arts
ANTH = anthropology
APPE = advanced pharmacy practice experience
BIOL = biology
BPHS = biological physical health sciences
CHEM = chemistry
COMM = communication
ECON = economics
FILM = film
FREE = free elective
GLBH = global health
HHEL = health humanities
HHWI = writing intensive health humanities
HIST = history based humanities courses
IPPE = introductory pharmacy practice experience
LITR = literature
MATH = math courses such as calculus and statistics
MGMT = management courses
MHUM = medical humanities
MUSI = music
PETR = professional elective transfer
PGEL= pharmacy general elective
PHAR = interdisciplinary pharmacy courses
PHED = physical education
PHIL = philosophy
PHIM = pharmacy information management courses
PHPR = pharmacy practice courses
PHRC = pharmaceutics courses
PHSC = pharmaceutical sciences courses
PHYS = physics
PSYC = psychology
PPEL = pharmacy practice electives
PROJ = special projects
PSEL = pharmaceutical sciences electives
RSPR = research project
SEMR = freshman seminar (Foundations of Learning)
SETO = selected topics
SOCI = sociology
SSCI = social science
WRIT = writing

A

ANTH 2220 Anthropology: The Human Story (3 Cr.)

Anthropology is the study of the evolving human species and the cultures it creates. It studies the past of fossils and artifacts as well as current traits. Time is "told" in the laboratory and in the field. Anthropology is a science of observation. This course intends to explore the past and some of our current world to learn about ourselves and about one of the social sciences that studies us. (social and behavioral science general education, social science selective; prerequisites: SOCI 2210 and WRIT 1102 with a C- or better)

APPE 7100 Advanced Pharmacy Practice Experience: Ambulatory Care (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. This ambulatory care APPE occurs in physician offices or clinics with access to an interprofessional health care team. Student pharmacists participate in medication management and education for a variety of chronic conditions. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7200 Advanced Pharmacy Practice Experience: General Medicine (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. This general medicine APPE occurs in hospitals with access to an interprofessional health care team. Student pharmacists participate in medication management and education for a variety of acute and chronic conditions for hospitalized patients. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7300 Advanced Pharmacy Practice Experience: Community Care (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. This community care APPE occurs in community pharmacies. Student pharmacists participate in daily pharmacy operations including prescription processing, medication management and education of patients, self-care referrals and recommendations, and other

management activities. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7400 Advanced Pharmacy Practice Experience: Health System (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. This health system APPE occurs in hospitals or acute care facilities. Student pharmacists participate in daily pharmacy operations in various areas of the facility including order processing, medication management and education of hospitalized patients, medication safety initiatives, and other management activities. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7500 Advanced Pharmacy Practice Experience: Patient Care Selective (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. This patient care selective APPE occurs in acute or ambulatory care settings with a focus on a medical subspecialty area (e.g., infectious disease, critical care, oncology, etc.). Student pharmacists participate in medication management and education for the specialty population. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7600 Advanced Pharmacy Practice Experience: Elective I (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities. Patient care elective APPEs occur in a variety of settings that provide direct patient care. Student pharmacists participate in medication management and education of patients. Non-patient care elective APPEs occur in a variety of settings without consistent direct patient contact. Examples of this type of setting include drug information, managed care, industry or research-intensive sites. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam,

minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7700 Advanced Pharmacy Practice Experience: Elective II (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities Patient care elective APPEs occur in a variety of settings that provide direct patient care. Student pharmacists participate in medication management and education of patients. Non-patient care elective APPEs occur in a variety of settings without consistent direct patient contact. Examples of this type of setting include drug information, managed care, industry or research-intensive sites. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

APPE 7800 Advanced Pharmacy Practice Experience: Elective III (5 Cr.)

During the last professional year of the pharmacy program, students complete a series of eight, full-time advanced pharmacy practice experiences (APPEs or "rotations"). The purpose of these APPEs is to prepare students to render patient care by practicing professional ability outcomes in a variety of environments. These courses are designed to build upon general and professional abilities developed in the preceding professional curricula. Students complete 200 hours over five weeks under the supervision of an approved pharmacist preceptor. Student pharmacists function as part of a team for a variety of activities Patient care elective APPEs occur in a variety of settings that provide direct patient care. Student pharmacists participate in medication management and education of patients. Non-patient care elective APPEs occur in a variety of settings without consistent direct patient contact. Examples of this type of setting include drug information, managed care, industry or research-intensive sites. (prerequisites: completion of all Professional Years 1 through 3 didactic coursework with a C- or better, passing scores on all top drugs proficiency exams and the pharmacy calculations proficiency exam, minimum cumulative professional GPA of 2.0, current Missouri intern license, completion of all health, drug testing and background requirements, and other state's intern/technician license as required if completing APPE outside of Missouri)

ARTS 1100 Introduction to Art History (3 Cr.)

This course will challenge students to develop and enhance their visual literacy skills by studying famous and not-so-famous works of art in several of their forms from the prehistoric era to the present. This course uses the visual arts as a vehicle for students to practice and refine their writing and global learning skills while enhancing their ability to become global thinkers and citizens. (humanities and fine arts general education; corequisite: WRIT 1101)

B

BIOL 1111 Introductory Biology I (4 Cr.)

This course introduces students to the chemical and biological principles that are needed for a foundational understanding of biological pathways within cells, energy creation and utilization, gene expression, and cell division and development. In the laboratory portion of the course, students will be expected to demonstrate appropriate laboratory techniques and collaborative learning skills, to use knowledge and skills obtained through observation and experimentation to demonstrate an understanding of the scientific method, and to gather and analyze data. Format: lecture and laboratory. (natural sciences general education; prerequisites: none)

BIOL 1112 Introductory Biology II (4 Cr.)

This course explores basic Mendelian genetics and its application to human genetics, the role of genetics in evolution and the mechanisms involved in natural selection. Evolution provides the conceptual basis for a study of the phylogenetic development of the biologic kingdoms in increasing order of complexity culminating with an in-depth discussion of animal form and function (emphasis on humans). Interactions between living organisms and the nonliving environment among living organisms provide a basis for discussing the impact of global changes on ecosystems. Format: lecture and laboratory. (natural sciences general education; prerequisites: BIOL 1111 with a C- or better)

BIOL 2220 Human Anatomy (4 Cr.)

The focus of this course is to use a systemic approach to learn and understand the details of human anatomy and applied anatomical and medical terminology. At every organizational level, emphasis is made on the relationship between structure and function. Format: lecture and laboratory. (prerequisites: BIOL 1112 with a C- or better)

BIOL 2231 Human Physiology (4 Cr.)

This course emphasizes basic cellular processes and current understandings of the cellular mechanisms of: cellular respiration, membrane transport, maintenance of ion gradients, electrical membrane potentials, contraction, cell signaling, signal transduction and second messenger systems. An overview is provided of cell-to-cell communication, general cytology, muscle contraction, synaptic transmission, neural reflex arcs, general endocrinology, general hematology, cardiovascular system, blood pressure regulation, respiratory system, urine formation, general acid-base balance, fluid and electrolyte balance, reproductive system and the digestive system. Format: lecture and laboratory. (prerequisites: BIOL 2220 with a C- or better; corequisites: CHEM 1212)

BIOL 2250 Genetics (3 Cr.)

An introduction to heredity. A balanced presentation is made in the fields of classical, molecular and population genetics. Topics include: Mendelian inheritance, the nature and behavior of the gene and chromosome, chromosome mapping, cytoplasmic inheritance, human genetics, microbial genetics, and heredity as related to environment and evolution. (STEM selective; prerequisites: BIOL 1112 with a C- or better)

BIOL 3240 Microbiology (4 Cr.)

This course introduces students to the history of microbiology, different types of microbial agents and their structures, microbial metabolism and culture methods, microbial genetics, microbial control and antimicrobial drugs, epidemiology and diseases of different body systems. The laboratory introduces students to brightfield microscopy and standard microbiological staining techniques. Standard microbiological culturing techniques will be employed to study known organisms and then applied to the analysis of unknown microorganisms. Format: lecture and laboratory. (prerequisites: BIOL 1111 with C- or better)

BIOL 3310 Cell Biology (3 Cr.)

This course focuses on the fundamental structures and processes of eukaryotic cells. Topics include membrane composition and dynamics, vesicular trafficking, inter- and intra-cellular communication, programmed cell death, the cell cycle, the cytoskeleton and molecular motors, cell contact and extracellular matrix interactions, cancer and stem cells. Format: lecture and discussion (STEM selective; prerequisites: BIOL 2231 and CHEM 2314 or CHEM 1232 with a C- or better)

BIOL 3320 Advanced Histology (3 Cr.)

The focus of this course is to use a systemic approach to learn and understand the details of histology. Histologists believe that the microarchitecture of tissues is the foundation on which physiology and pathophysiology are built. Topics to be studied include the specialization of cells and intercellular connections, the classification of the histological categories, the microarchitecture of tissues within organs, and the functional and structural interrelationship of the tissues. References to clinical evaluations made using pathology of tissues will be incorporated into the content while studying normal tissue structure. Format: lecture and laboratory. (advanced biology selective, STEM selective; corequisites: BIOL 2231)

BIOL 3330 Extreme Physiology (3 Cr.)

This course will examine the interrelations between homeostatic, compensatory mechanisms and specific features of environmental stress. The effects of external body temperature, relative humidity, barometric pressure and gravity, on basic physiologic processes such as external and internal gas exchange, obligate water loss, blood circulation, etc. will be examined in some detail. Building off of the concept of gradients, the course will explore how specific alterations in normal gradients would be expected to alter physiologic function. Students will choose an extreme environment and research answers revealing if and how the human body could adapt and acclimate to the specific suite of environmental challenges presented by that particular environment. The limits of human physiology will be compared and contrasted with other animals' adaptations (if any) to specific components of those extreme environments. (advanced biology selective, STEM selective, writing intensive; prerequisites: BIOL 2231 and CHEM 2314 or CHEM 1232 with a C- or better)

BIOL 3340 Public Health Microbiology (3 Cr.)

In this course we will review some of the historical highlights of human and microbe interactions in health and disease from food production and preservation, to the development of the concept of contagion and the global impact of infectious disease in human history (smallpox, plague, cholera, malaria, typhus, influenza, tuberculosis, polio, AIDS, Ebola etc.). We will look at the driving forces behind the development of public health projects as a product of the industrial revolution (drinking water quality, waste treatment, industrial food production and delivery from the farm to the table). The discovery, development and widespread use and misuse of antimicrobials and their impact on the maintenance and treatment of human health and disease. The role of vaccines in the maintenance of human health primarily by prevention of disease will also be discussed. (advanced biology selective, STEM selective; prerequisites: BIOL 3240 with a C- or better)

BIOL 3350 Aerobic Energy Metabolism (3 Cr.)

This writing-intensive course examines the limitations of oxygen kinetics in the production of energy (ATP) in humans. The normal physiologic limitations of the heart, lung, blood and skeletal muscle on the aerobic production of energy at rest and during maximal aerobic exercise will be emphasized. Additionally, the effects of various conditions and diseases, especially the heart, lung, blood and skeletal muscle on aerobic energy production, will be explained. This course also emphasizes the technical considerations of measurement and calculation of oxygen kinetics-related variables. The intent of this course is to provide students with an additional opportunity to extend their understanding of physiological-related mechanisms in health and disease, as well as improve their scientific writing skills. (advanced biology selective, STEM selective, writing intensive; prerequisites: CHEM 3320 with a C- or better)

BIOL 3370 Nutrition for Pharmacists (3 Cr.)

A lecture and discussion elective, this course will provide students with a background in general nutrition that will inform them about the role of nutrition and good health. This course will focus on the positive and negative effects that various types of food choices have on health. This course does not include clinical nutrition, but should provide sufficient background information to foster comprehension of the role of nutrition in managing disease states when this material is taught in subsequent pharmacy courses. After successfully completing this course, students should be able to: analyze a diet to determine its nutritional merit, evaluate their own diet for strengths and weaknesses, advise others on the components of a good diet, demonstrate the connections between health, disease and diet, evaluate the quality of nutrition information available in the media, understand the factors that influence dietary choices, and understand the long term consequences of our current unsustainable food production methods. (STEM selective, writing intensive; prerequisites: BIOL 2231 with a C- or better; corequisites: CHEM 3320)

BIOL 4100/BIOL 4360 Principles of Immunology (2 Cr.)

The focus of this course is to introduce students to the cellular, molecular and biochemical aspects of the innate and adaptive immune systems. An emphasis will be placed on learning and understanding the differences and interconnectedness of these two systems. Format: lecture (prerequisites: BIOL 3240 with a C- or better) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

BIOL 4101/BIOL 4432 Medical Physiology (3 Cr.)

The overall aim of this course is to acquire a thorough knowledge and appreciation of the function and control of normal organs and systems that will serve as the basis for a high level of understanding of the physiological basis of clinical medicine. The essential concepts of physiology and mechanisms of body function are presented at various levels of organization, ranging from cellular and molecular to organ system levels. Emphasis is placed on understanding the integrated regulation of various body processes among the major systems that is and are necessary to maintain homeostasis. In this course, students are exposed to foundational information necessary for both rendering pharmaceutical care and for understanding their own health status. Appropriate use of medical terminology is reinforced and students are given the opportunity to reinforce the information-seeking and information-interpreting skills, behaviors and attitudes that are essential in the development of life-long learning habits. (advanced biology selective; prerequisites: BIOL 2231 and CHEM 3320 with a C- or better) (restrictions: Professional Year 1 or senior year status)

BIOL 4200/BIOL 4350 Principles of Molecular Biology and Genetics (3 Cr.)

This Professional Year 1 course introduces students to principles of nucleic acid and protein synthesis and function in relation to pharmacy and medicine. These include: nucleic acid and protein structure, the significance of molecular complementarity, processes of DNA replication, repair and recombination, DNA manipulation and its application, RNA synthesis and processing, protein synthesis, and regulation of gene expression in prokaryotes and eukaryotes. This course also introduces genomics, pharmacogenomics, basic molecular genetics and principles of human molecular genetics as related to cell cycle and cancer. Format: lecture and laboratory. (prerequisites: BIOL 3240 with a C- or better) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

BIOL 4310 Biology Seminar (1 Cr.)

The biology seminar will provide an opportunity for students in biology to choose journal articles in their area of interest to present a journal club to their classmates who will review and critique their presentation. The students will also find a science seminar presentation to attend outside of class to evaluate. These activities will help prepare a student for a post-graduate career path in science or medicine in which they need to be able to communicate with others in their field. Format: discussion (prerequisites: BIOL 2231 with a C- or better)

BIOL 4400/BIOL 4460 Immunology (3 Cr.)

The focus of this course is to introduce students to the cellular, molecular and biochemical aspects of the innate and adaptive immune systems. An emphasis will be placed on learning and understanding the differences and interconnectedness of these two systems. Immunological processes as they apply to methodologies and assays will be discussed. This course may fulfill the immunology requirement for the professional program along with an additional professional elective hour. Format: lecture and discussion (advanced biology selective; prerequisites: BIOL 3240 with a C- or better)

BIOL 4410 Neuroscience (3 Cr.)

This course focuses on the structures and functions of the human nervous system. This course begins with the study of neurons and the propagation of nerve impulses. We will also study the transfer of information between nerve cells, the effects of drugs, and the development of the nervous system. We then move to the sensory systems such as olfaction, hearing and vision and discuss how physical energy such as light may be converted into neural signals and where this information is processed within the brain. Next we study the control of voluntary movement. Finally, we cover the neurochemical bases of brain diseases and those systems which control motivation, emotion, learning and memory. (advanced biology selective, STEM selective; prerequisites BIOL 2231 or BIOL 3310 and PHYS 3200 or PHYS 3212)

BIOL 4450 Molecular Biology and Genetics (4 Cr.)

The course introduces students to modern molecular techniques involving both eukaryotic and prokaryotic nucleic acid replication, regulation and expression of

genes, protein synthesis and function. Topics regarding disruptions in eukaryotic processes that may lead to disease such as cancer will be discussed, as well as different medications that target these processes. The laboratory introduces students to standard molecular techniques such as nucleic acid isolation, polymerase chain reaction, gel analysis, cloning and sequence analysis. This course does not fulfill the molecular biology requirement for the professional program. (prerequisites: BIOL 3240 with a C- or better)

BPHS 1100 Science Connections (3 Cr.)

Most medical advances we enjoy today arose from a trail of scientific discoveries that were never intended for those purposes. The aim of this course is to give students an appreciation for the value of basic science, not only for its insight into nature, but also for its ability to fuel unimaginable technologies and medical advances. Each semester students choose medical advances to discuss in class and explore how they are rooted in multidisciplinary scientific discoveries. Format: lecture, active-learning activities, and hands-on demonstrations. (natural sciences general education; prerequisites: none)

BPHS 3310 Biotechnology and Chemical Biology (3 Cr.)

Biotechnology offers students an overview of the various ways in which biochemistry, chemistry, microbiology and molecular biology are applied to an industrial process, laboratory technique or a technology product. This course is focused on the molecular and chemical details of the components, devices and systems that are used in biotechnology processes and chemical products. This material is delivered in both a lecture setting and through outside reading utilizing primary literature and review articles. A large component of class time is devoted to problem-solving and discussion. In this sense, some of the course follows a 'flipped-classroom' model. In discussion, current biotechnology processes or chemical products are evaluated for their effectiveness, economic impact and ethical concerns. Goals of the course include students developing an understanding and appreciation for what biotechnology and chemical biology are, their current limitations and their future potential. Particular attention is placed on strengths and weaknesses of biotechnology and chemical biology with respect to chemical composition, cost, technical feasibility, effectiveness, toxicity, timescale and environmental impact. Emphasis is placed on applying biological and chemical principles to problem-solving, creative design of products or processes of biotechnology, the reading and interpretation of scientific literature and published data and analysis of presented biotechnologies and techniques. This course contributes to the College mission by advancing students' understanding of how science can be applied to address societal needs. (advanced biology selective, advanced chemistry selective, STEM selective; prerequisites: CHEM 3320 or BIOL 4200/BIOL 4350 or BIOL 4450 with a C- or better)

BPHS 3320 Forensic Science (3 Cr.)

This course introduces students to the fundamentals of criminalistics (the scientific study and evaluation of physical evidence in the commission of crimes) and focuses primarily on the forensic evidence aspects of criminal investigation. Students are familiarized with identifying, collecting, preserving, accurately recording and processing evidence. Topics covered include: physical evidence, crime scene reconstruction, death investigation, serology, drugs/toxicology and DNA analysis. Demonstrations will give students some insight into what it is like to properly collect and interpret crime scene evidence. (advanced biology selective, STEM selective; prerequisites: BIOL 2231 and CHEM 2314 or CHEM 1232 with a C- or better)

BPHS 3352 Introduction to Data Science (3 Cr.)

In this introductory course, students will learn fundamental aspects of computer programming necessary for conducting scientific data analysis and research. By the end of the course students will be able to use these tools to import data into R, perform analysis on that data, and export the results to graphs, text files and databases. By learning how to get the computer to do their work for them, students will be able to do more science faster. The course will be taught using R and SQLite, but the concepts learned will easily apply to all programming languages and database management systems. No background in programming or databases is required. (STEM selective; prerequisites: MATH 1120, CHEM 2314 or CHEM 1232 with a C- or better)

BPHS 3360 Science, Ethics and Society (3 Cr.)

This discussion-based course is designed to provide an opportunity for undergraduate students to create connections between their science coursework, our society and the ethical issues of science. Topics address basic questions that scientists face continuously, from our responsibilities to human and animal subjects, to the social consequences of our discoveries and their implementation, to the treatment of individual scientists within the greater scientific community. The common thread throughout the course is the topic of scientific integrity. The course looks at who participates in science at various levels, issues of implicit bias, the value of diversity in science and approaches to make science accessible to all. Students will learn about issues of ethics in science and wrestle with activities that help them understand the complexities of scientific integrity and ethics within science and society. Format: discussion (advanced biology selective, STEM selective, writing intensive; prerequisites: BIOL 2231 and CHEM 2314 or CHEM 1232 with a C- or better)

BPHS 3370 The Fate of the Planet: Man's Impact on the Earth (3 Cr.)

This course addresses the relationship between our species, Homo sapiens, and the well-being of the earth's ecosystems. The course begins with the big bang and then follows the rise of life on Earth and the evolution of human beings. Students will learn how the environment shaped early humans and also how humans have, over time, altered the environment. Disruption of ecosystems by human activity will be explained. All of this leads up to the current problems we are facing with anthropogenic climate change. (STEM selective, writing intensive; prerequisites: BIOL 2231 with a C- or better; corequisites: CHEM 3320)

C

CAPS 6000 Integrated Capstone Selective (3 Cr.)

This course will further hone patient care skills, develop project skills within the community pharmacy setting, and prepare students for advanced pharmacy practice experiences and their professional careers. The course utilizes a mixture of lecture, discussion, group work and other learning strategies for enhanced student participation and application. (prerequisites: all required courses for Professional Years 1 and 2, PHAR 6161, PHAR 6181, PHAR 6191, PHIM 6131, and PHPR 6141 with a C- or better; corequisites: PHAR 6202, PHAR 6212, PHAR 6222, PHPR 6152, MGMT 6100, and IPPE 6150)

CHEM 1111 Chemical Structure and Physical Properties (CHEM 1) (4 Cr.)

This course is a reintroduction to the physical world that students live in through the eyes of a chemist. All matter is composed of atoms, and students begin their journey looking at the nature of atoms and their core composition and periodic properties. Matter is not just atoms, but combinations of atoms that form molecules. The nature of these combinations is explored through ways that electrons are shared to form bonds and the characteristic physical properties exhibited in molecules. Students will explore how and why atoms form bonds, the multiple ways that bonds are formed, the geometric patterns that atoms take when bonded, and the physical manifestations of these combinations. The interaction of atoms and molecules with electromagnetic radiation is a key physical property of matter. Students will explore multiple types of spectroscopy (photoelectron, ultraviolet, infrared and nuclear magnetic resonance) to explain atomic and molecular structure. Finally, since the same number and types of atoms can combine in multiple ways, students will be confronted with isomeric relationships, conformational relationships and stereochemical relationships that result from atomic connectivity. Format: lecture and laboratory. (natural sciences general education; prerequisites: none)

CHEM 1212 Chemical Structure and Reactivity (CHEM 2) (4 Cr.)

This course is an introduction to chemical reactivity and the requirements that must be met for a chemical reaction to occur spontaneously. Students explore thermodynamic properties of enthalpy and entropy to explain why reactions occur and cause the free energy available from chemical reactions to do work. Kinetic processes are studied to explain how reactions occur through collisions and the factors affecting the likelihood of a collision. Reaction mechanisms are introduced using acid-base theory to describe equilibrium reaction processes. This provides

groundwork for discussing many biologically relevant reactions in terms of nucleophiles and electrophiles. Key chemical reaction categories will include substitution, elimination, electrophilic addition and substitution in p-systems (olefins and aromatic compounds), oxidation/reduction, and radical reactions. The formation and stability of reaction intermediates will also be used to explain stereochemical and regiochemical outcomes of reactions. Format: lecture and laboratory. (natural sciences general education; prerequisites: CHEM 1111 with a C- or better)

CHEM 1231 Organic Chemistry 1 (4 Cr.)

CHEM 1231 is the first semester of a two semester organic chemistry course. We will be exploring chemical properties and representations of organic molecules and how they relate to pharmaceuticals, the key reactions for drug action and metabolism through classic organic chemistry examples and an introduction to organic drug synthesis. Format: lecture and laboratory. (prerequisite: AP Credit or transfer of general chemistry 1 and 2 sequence)

CHEM 1232 Organic Chemistry 2 (4 Cr.)

CHEM 1232 is the second semester of a two semester organic chemistry course sequence. We will explore chemical properties and representations of organic molecules and how they relate to pharmaceuticals, the key reactions for drug action and metabolism through classic organic chemistry examples, spectroscopic determination of molecular structure, and an introduction to organic drug synthesis using principles of introductory organic chemistry. Format: lecture and laboratory. (prerequisite: CHEM 1231 with a C- or better)

CHEM 2213 Organic Chemistry with a Biological Emphasis (CHEM 3) (4 Cr.)

This course explores reactivity from the standpoint of biologically important compound classes that contain carbonyl groups: ketones, aldehydes, imines, carboxylic acids and their derivatives. Emphasis is placed on steric and electronic factors that affect direct reaction with these molecules. Metathesis reactions in the form of condensation reactions are critical to further understanding the kinetic and thermodynamic requirements for product formation. Since many pharmaceutically relevant molecules and biologically important macromolecules are composed of carboxylic acid derivatives, reactions leading to formation and decomposition of these functional groups are emphasized. Finally, students apply concepts of chemical reactivity to biologically important examples including: prodrugs, metabolism of drugs, glycolysis and receptor/enzyme activity. Format: lecture and laboratory. (prerequisites: CHEM 1212 with a C- or better)

CHEM 2314 Fundamentals of Chemical Quantitative Analysis (CHEM 4) (4 Cr.)

This course explores quantitation of biologically important covalent and ionic chemical species and processes. In previous coursework, students have explored why chemical properties and reactions occur. In this course students will focus on calculations and measurements of chemical matter. Since many pharmaceutical decisions are based on quantified values, topics will include balancing chemical equations, determining amounts of products and reactants at equilibrium, measuring and predicting concentrations based on solubility and acid or base properties, and quantifying materials based on oxidation and reduction potentials. Emphasis will be placed on instrumental analytical chemistry and treating devices not as "black boxes," but specifically designed pieces of equipment that are tailored to specific measurement needs. Overarching goals for the course include development of critical thinking, interpretation of analytical data and understanding of instrumental approaches to quantify the chemicals that affect biological systems. Format: lecture and laboratory. (prerequisites: CHEM 2213 with a C- or better)

CHEM 3320 Biochemistry (CHEM 5) (4 Cr.)

This course integrates students' prior coursework in biology and chemistry in order to apply the nature of chemical systems to biological processes. It covers the biochemistry of carbohydrates, lipids, amino acids, proteins, nucleotides and nucleic acids; mechanisms of enzyme action and the regulation of enzymatic pathways; intermediary metabolism; lipid and nitrogen metabolism and physiochemistry of hemoglobin, the vitamins and selected hormones. Case studies and inquiry exercises will be presented to students for exploring data collection, data planning, hypothesis

generation, experimental design and data analysis. Student groups will analyze and present data from the primary literature. Format: lecture and laboratory (prerequisites: CHEM 2314 or CHEM 1232 with a C- or better)

CHEM 3330 Topics in Synthetic Organic Chemistry (3 Cr.)

Synthetic organic chemistry plays an important role in the drug development process by allowing scientists to create complex molecular structures. Modern application of synthetic reactions will be explored from recent literature. Discussions will include mechanism and retrosynthetic application of these reactions in key bond-forming reactions. The reactions discussed will be used to propose syntheses of drug-like molecules. (advanced chemistry selective, STEM selective, writing intensive; prerequisites: CHEM 2314 or CHEM 1232 with a C- or better)

CHEM 3331 Spectroscopic Identification of Organic Compounds (3 Cr.)

The purpose of this course is to be a comprehensive and contemporary introduction to the diverse and fascinating spectroscopic methods in organic chemistry. In this course, students will explore the use of infrared (IR) spectroscopy, mass spectrometry (MS), 1D and 2D nuclear resonance (NMR) spectroscopy, and ultraviolet spectroscopy to determine the structures of organic compounds. The course covers underlying principles and also provides direct experience in interpretation of spectral data. Determination of unknown organic structures from spectral data is a highly rewarding puzzle-solving experience. All students will be trained in interpreting individual spectra and sets of combined spectra obtained by different methods, so that molecular compounds and materials are quickly and efficiently characterized with respect to their structure. Special emphasis will be placed on discussing, interpreting and documenting the data. This course will spend a majority of time on NMR spectroscopy but all of the methods will be used together to provide structural clues. (advanced chemistry selective, STEM selective; prerequisites: CHEM 2213 or CHEM 1231 with a C- or better)

CHEM 3375 Physical Chemistry (3 Cr.)

This course integrates and applies knowledge from the disciplines of chemistry, physics and mathematics. Specifically, students will develop and explore theoretical methods and models for the quantum description of atoms and molecules as chemical systems using spectroscopic evidence as the basis. Students will examine and employ statistical methods that link the macroscopic and molecular levels of these descriptions. Students will also derive and analyze kinetic models to explain observed chemical reaction rate behavior. (STEM selective; prerequisites: CHEM 2314, PHYS 3212, and MATH 1111 with a C- or better)

CHEM 3381 Project Based Chemistry Lab I (3 Cr.)

This collaborative lab course integrates topics from analytical, biochemistry, organic and physical chemistry in project based labs that encourage students to explore how these chemical disciplines inform the scientific process. Students will form teams with team leaders to explore synthesis of biologically relevant compounds, use modern analytical instrumentation to evaluate products, and use theories from each of the chemistry sub-disciplines to explain results. (prerequisites: CHEM 3370, CHEM 3375, and CHEM 3320)

CHEM 3350 The Internet of Things (3 Cr.)

The Internet of Things (IoT) is the network of physical objects or “things” embedded with electronics, software, sensors and network connectivity which enables these objects to collect and exchange data. IoT is found in a wide variety of settings such as health care (e.g. heart monitoring implants), industry (e.g. RFID chips for monitoring inventory), homes (e.g. smart thermostats) and even wearable technology (e.g. fitbits). In this course students will learn some of the skills required to design a project to remotely interact with a physical system of their choosing. Topics the student will learn include python programming, circuit design, internet protocols and chemical and physical sensors. Format: lecture and laboratory. (advanced chemistry selective, STEM selective; prerequisites: CHEM 2314 or CHEM 1232)

CHEM 3351 Cheminformatics (3 Cr.)

Cheminformatics is the study of using computers and informational techniques to solve problems in chemistry. It has now evolved to solve problems for the pharmaceutical industry by predicting chemical and biological properties of molecules as well as managing large chemical data sets. The world of big data is here, and the focus of this particular cheminformatics course is to provide students with an understanding of the nature of digital chemical data, and how to connect the workflow of professionals requiring chemical data in their jobs to the infrastructure of online chemical data repositories. (advanced chemistry selective, STEM selective; prerequisites: CHEM 2314 or CHEM 1232 with a C- or better)

CHEM 3360 Chemistry Learning Assistant Pedagogy (3 Cr.)

CHEM 3360 is a pedagogy course that introduces student learning assistants (LAs) to educational research, active learning and strategies that support: (1) eliciting student ideas and helping all group members become active and engaged in the class, (2) listening and questioning, (3) building relationships and (4) integrating learning theories with effective practices. In this course, LAs read articles from the education literature both specific to the chemistry discipline and more general. They engage in discussions about their experiences with students and how this relates to the literature, and they complete assignments including weekly online teaching reflections and interview-based investigations into students' current ways of thinking about a topic. They design interventions to assist students with topics or skills that are found to be difficult for students, and they solicit mid-semester evaluations of their teaching. In addition to the pedagogy meeting time, LAs are required to facilitate at least once per week during the CHEM 1111 course as well as develop and conduct effective supplemental learning sessions once per week. (advanced chemistry selective, STEM selective; prerequisites: CHEM 2314 or CHEM 1232 with a C- or better and approval of instructor)

COMM 1100 Fundamentals of Public Speaking (3 Cr.)

This course provides students a comprehensive introduction to speech communication both in theory and in practice. Over the course of the semester students will read, hear about, discuss, and practice core concepts of oral communication. They will engage in frequent "presentation" activities ranging from the brief and informal to the researched and refined. Samples of such presentations include answering discussion questions at length in class, facilitating class discussion using active listening, delivering extemporaneous informational presentations, and outlining and delivering the equivalent of a persuasive speech using electronic visual aids. (oral communication general education; prerequisites: none)

COMM 3200 Health Care Communication (3 Cr.)

This course covers the principles and practices of interpersonal communication, public speaking and conflict management with special emphasis on skills needed in the health care field: gathering information from diverse patients, demonstrating empathy, managing difficult, emotion-laden situations and relating effectively with other health care professionals. Emphasis is given to applying communication concepts to real world scenarios. Class meets three hours weekly for lecture, discussion and application. (oral communication general education; prerequisites: HIST 2201, HIST 2202, PSYC 2210, SOCI 2210 and WRIT 1102 with a C- or better; corequisites: PHAR 1102)

COMM 3300 Intercultural Communication (3 Cr.)

This course serves as an introduction to the basic terms, concepts and theories of intercultural communication. It highlights the dynamics that characterize the life of a culture and the implications of these dynamics for the way we communicate within and across cultures. It attempts to heighten students' sensitivity to and awareness of their own cultural grounding, as well as that of people who are different from them, and asks them to apply communication strategies to construct more productive and beneficial intercultural outcomes. Emphasis is on connecting theory and practice through

the analysis of various texts, films, case studies and out-of-class events. Class meets three hours weekly for lecture, discussion and application. (health humanities selective, social science selective; prerequisites: COMM 3200 with a C- or better)

COMM 3310 Communication for Health Behavior Change (3 Cr.)

Students will examine how messages influence people's perceptions of health concepts and health-related behaviors as well as evaluate the specific communication strategies used to influence perceptions and generate positive behavioral change. Students will be encouraged to examine previously applied communication research and behavior-modification communication strategies used for social change and offer critiques of these strategies. Students will demonstrate applied learning by designing communication strategies and community involvement projects for a specific target audience chosen by the student in conjunction with the instructor. Class meets three hours a week for lecture, discussion, group work and activities applying course material to historical and contemporary examples. (social and behavioral science general education, health humanities selective, social science selective; prerequisites: none; corequisites: COMM 3200)

D

E

ECON 3200 Microeconomics with a Health Care Emphasis (3 Cr.)

This course will acquaint the student with the principles and methods of microeconomics and the skills needed to critically apply economic principles to health care decision-making for health systems, health care providers and patients. The course includes both microeconomic and macroeconomic perspectives, including the individual and firm level to the market level, as well as a macroeconomic view of public policy affecting health care. Special attention is given to the extrapolation of basic concepts to understand public policy initiatives and emerging health care trends. This course includes lecture, active learning exercises and class discussion. (social and behavioral science general education; prerequisites: none)

F

FILM 3300 Mental Health and Illness in Film (3 Cr.)

This course focuses on the ways that film has reflected, informed and shaped our understanding of mental health and illness as identifiable states and conditions. Students will view and analyze a wide range of films to develop critical insights into the concepts of mental health and illness as they have developed over time to inform current discourse. The course helps students learn to connect the ideas of health and illness to the larger aesthetic, cultural and philosophical contexts that film inevitably engages. (humanities and fine arts general education, health humanities selective, writing intensive; prerequisites: WRIT 1102 with a C- or better)

G

GLBH 1100 Introduction to Global Health (3 Cr.)

This course introduces students to the structures and core issues related to global health including diversity, human rights and ethics; environmental, social and economic determinants of health; global epidemiology of disease; health systems and health professionals; and global health governance. This course will serve as a foundation for students enrolled in the global health program. (social and behavioral science general education; prerequisites: none)

H

HIST 2100 James Baldwin's America, 1917 to 1984 (3 Cr.)

Using both Baldwin's essays, and the writings central to postwar social movements, this course will touch on the feminist and the womanist movements, the free speech and peace movements on college campuses, and the gay rights movement, as well as the Civil Rights movement, as outgrowths from Baldwin's perceptions. The course will also address the responses against them, typified by Phyllis Schlafly's "Silent Majority," by Dinesh D'Souza and the "Dartmouth Review," and by the Reagan coalition. While we won't propose to resolve the breach

these various points represent, we hope to engender Baldwin's tenet that informal conversation always beats formal confrontation. (humanities and fine arts general education, history selective; prerequisite: "an open mind")

HIST 2201 Global Heritage I (3 Cr.)

This course is an interdisciplinary, history-based humanities course which uses a historical framework to introduce students to the best that human beings have created, written and achieved from the disparate creation stories through the Age of Exploration with an emphasis on artistic, philosophical and technological achievements. This sequence of courses uses the humanities and history as vehicles for students to practice and refine their critical thinking, writing and global learning skills while enhancing their ability to become global thinkers and citizens. (humanities and fine arts general education; prerequisites: WRIT 1102 with a C- or better)

HIST 2202 Global Heritage II (3 Cr.)

The next course in this interdisciplinary, history-based humanities sequence expands upon the foundations, key concepts and abilities introduced in Global Heritage I. The scope of this course will span the later Middle Ages through the Age of Revolutions and will explore the consequences of key global events that have informed the modern world. Core concepts explored in this course include the consequences of increased inter-hemispheric interaction and the emergence of new perspectives, populations and technology. (humanities and fine arts general education; prerequisites: HIST 2201 with a C- or better)

HIST 3300 Art of Autobiography (3 Cr.)

This humanities course uses various first-person accounts to flesh out a single, larger event, such as America's pursuit and use of the atomic bomb during World War II. As part of the course, students will produce a research paper that could be used as part of a graduate school application. (health humanities selective, history selective, writing intensive; prerequisites: HIST 2201 with a C- or better)

HIST 3303 Global Heritage III (3 Cr.)

This history-based humanities selective course represents the capstone course of this sequence and ranges from the Age of Revolutions to 9/11 and the global war on terror. This course explores the developing relationships between nation-states, aspiring nationalists, transnational actors, overarching global forces and trends and competing new worldviews regarding the shape and direction of an increasingly connected world. (social and behavioral science general education; prerequisites: HIST 2202 with a C- or better)

HIST 3310 Science and the Supernatural (3 Cr.)

This course examines the epistemologies and assumptions that serve as the lenses for scientific and supernatural discourses in both western and non-western contexts. Topics covered include parapsychology, ghosts, aliens, cryptids, secret societies, paranormal geographies and "alternative" medicine. In uncovering the deep structures that undergird scientific and supernatural rationalities, students will develop an awareness of their own cultural identities and biases, as well as those of others. Students will write about paranormal topics from within the specific rationality of modern science. They will practice writing for other scientists according to scientific conventions and translating scientific concepts for popular audiences. (health humanities selective, history selective, writing intensive; prerequisites: HIST 2202)

HIST 3320 Global Public Health (3 Cr.)

This course provides an introduction to the problem of disease and strategies of public health in the colonial and post-colonial world from the 1880s to the present. This course will focus on the relationship between medical knowledge and the political, economic and intellectual foundations of colonialism, with geographical emphasis upon developments in Latin America and Africa. Students will examine the emergence of "tropical disease" concepts, the rise of international health organizations and the absolutist models of disease eradication forged in colonial and post-colonial contexts. Students will also investigate whether, and to what extent, we are heir to a uniquely colonial past of public-health thinking and practice. (health

humanities selective, history selective, writing intensive; prerequisites: HIST 2202 with a C- or better)

HIST 3340 The Global Pharmacist (3 Cr.)

This interdisciplinary course takes a holistic approach to the human experiences of embodiment, suffering and healing across historical periods, diverse cultures and through the life cycle. Students will become familiar with the biomedical model, which is rooted in modern western biomedical science and practice, and the biocultural model, which comprises the multiple cultural, social, economic and individual forces that shape the culture of healing in and beyond official medicine. (health humanities selective, history selective, writing intensive; prerequisites: HIST 2202)

HIST 3350 Illness, Identity and Inequality in U.S. History (3 Cr.)

This course examines the historical role that social identity has played in mediating the delivery and experience of health care in the U.S. It traces changes over time in the experience of American patients whose identities have been filtered through the social categories of gender, race or ethnicity, sexuality, class and religion. (humanities and fine arts general education or social and behavioral science general education, health humanities selective, history selective, writing intensive; prerequisites: WRIT1102 and SOCI 2210 with a C- or better)

HIST 3360 Good Wives, Witches and Healers: Reclaiming Women's Medicine (3 Cr.)

This history-based humanities course reclaims the history of women as healers and patients from antiquity to the global postmodern and intersectional present. Ancient and medieval understandings of sex difference, the male gaze and the construction of the female body, the patriarchal demonization of midwives and the construction of witchcraft, the transmission of medical knowledge between lay women, clerical orders and the rise of nursing, medicine in colonial New England and on the Plains, the growth of nursing and its suppression by male authorities, the construction of the female patient as hysterical and the power of women in the health professions are discussed in the first two thirds of the class. The last third of the class examines the continued role of women as goodwives, traditional healers and medical professionals in cultures around the globe and beyond the binary. What emerges is a timeless image of women as powerful agents for caring and curing despite all attempts to marginalize the female authority. (health humanities selective, history selective, writing intensive; prerequisites: HIST 2202)

I

IPPE 4110 IPPE AND IPE: Population Health and Health Care Teams (1 Cr.)

This course is designed to introduce students to concepts of the pharmacist's role in population health and interprofessional collaboration through classroom and site activities (prerequisite: Missouri intern license and health requirements) (restrictions: Professional Year 1 status and must enroll in MGMT 4100 while enrolled in IPPE 4110 in fall or spring)

IPPE 5123 Introductory Pharmacy Practice Experience: Community Pharmacy (1 Cr.)

This required course introduces students to community pharmacy practice through a supervised, three-week full-time experience (120 hours) at an assigned community pharmacy. On-site experiential hours are completed under the supervision of an approved pharmacist preceptor. Student pharmacists will function as part of a pharmacy team for a variety of activities. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, IPPE 4110, MGMT 4100, PHAR 4112, PHIM 4110, PHPR 4112, PHRC 4101, PHRC 4122, and PHSC 4101 with a C- or better, Missouri intern license, health requirements, drug testing requirements, background check requirements and other state's intern and technician license as required if completing outside Missouri)

IPPE 5130 IPPE and IPE: Patient-Based Care and Health Care Teams (1 Cr.)

This course is designed to introduce students to concepts of the pharmacist's role in primary care and interprofessional collaboration through classroom and off-campus site activities (prerequisites: IPPE 4110, IPPE 5123, PHAR 4112, and PHPR 4112 with a C- or better, Missouri intern license, health requirements and certifications; corequisites: PHPR 5121 and PHPR 5131)

IPPE 6143 Introductory Pharmacy Practice Experience: Health System Pharmacy (3 Cr.)

This required course introduces students to health system pharmacy practice through a supervised, three-week, full-time experience (120 hours) at an assigned health system pharmacy. On-site experiential hours are completed under the supervision of an approved pharmacist preceptor. Student pharmacists will function as part of the pharmacy team for a variety of activities. (prerequisites: BIOL 4100, BIOL 4101, IPPE 4110, IPPE 5123, IPPE 5130, PHAR 4112, PHAR 5121, PHAR 5131, PHAR 5142, PHAR 5152, PHIM 5122, PHPR 5132, PHRC 4101, PHRC 5131, and PHSC 4101 with a C- or better, Missouri intern license, health requirements, drug testing requirements, background check requirements, other state's intern and technician license as required if completing outside Missouri, current basic life support certification, and current immunization certification)

IPPE 6150 IPPE and IPE: Transitions of Care and Health Care Teams (1 Cr.)

This required course introduces student pharmacists to the importance of effective transitions of care within and between health care settings. Student pharmacists will complete a total of 20 experiential hours performing transitions of care services in one of four settings (community pharmacy, health system pharmacy, long-term care pharmacy or ambulatory care pharmacy). On-site experiential hours will be completed under the supervision of an approved pharmacist preceptor. Student pharmacists will function as part of the health care team for a variety of activities and will have the opportunity to interact with other health care professionals to emphasize the importance of collaboration at crucial transitions. Student pharmacists will also work with other health profession students in case-based application activities focused on transitions of care. (prerequisites: IPPE 4110, IPPE 5123, IPPE 5130, PHAR 5121, PHAR 5131, PHAR 5142, PHAR 5152, and PHPR 5132 with a C- or better along with completion of all health requirements, background check, and licensure requirements including a current Missouri pharmacy intern license, current basic life support certification, and current immunization certification; corequisites: IPPE 6143, PHIM 6131, PHPR 6141 and PHPR 6152)

J

K

L

LITR 2210 Masterpieces in Children's Literature (3 Cr.)

This literature elective course focuses on the ways that literature reflects, informs and shapes our understanding of childhood as a distinct stage of human experience. Students will read and write analyses of a wide range of classic and (selected) contemporary literary texts for children to develop critical insights into the real and imagined differences between children's and adults' sensibilities, needs and imaginative experiences of nature and society. The course helps students to develop versatile tools for textual analysis and learn to approach literature as a rich record of human consciousness and possibility. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 2220 Creative Nonfiction (3 Cr.)

This course focuses on learning to interpret and appreciate narrative nonfiction. The course includes lectures, discussions, readings and writing assignments. This course fulfills the literature requirement. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 2230 Literature and Media (3 Cr.)

This course explores the development of literature through four stages of communication development: oral-aural, script, print and electronics. Students will read literary selections from each of these areas and identify how the medium shapes theme, structure and response. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 2240 Drama (3 Cr.)

In this course students read, interpret, discuss and write about plays originally written during a range of periods and in a variety of genre forms, but are still included

in the traditional literary canon. They do so not only to enjoy the material for its own sake, but also to cultivate the skills of close reading and interpretation, to develop the capacity to infer motivation from behavior, and to derive insights into the personalities in the stories as well as their own sensibilities as they engage vicariously in the emotional life of the fictional heroes and villains, lovers and enemies, characters and caricatures in the plays. The students read and discuss plays, write papers and attend at least one live performance of a play on which they write a review. Coursework also includes writing assignments and examinations on each play, and lots of in-class conversation. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 2250 Comics and Mental Illness (3 Cr.)

This 2000 level literature selective introduces students to the academic study of comics through an analysis of comics about mental illness. The course will focus on learning how to read comics and on understanding how comics portray the experiences of those who experience mental illness, those who are doctors, caregivers or friends or family of those with a mental illness, and those in the medical community who treat mentally ill patients. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 2251 Global Comics: Home, History, Culture, Displacement (3 Cr.)

Introduces students to the academic study of comics through an analysis of comics about history, culture and displacement. This course focuses on the meanings of "home" and "culture," and how these meanings shift or are displaced when people are forcibly relocated or come into contact with new cultures. It examines how new homes or cultures may be forged as the result of political and social upheaval, immigration and travel. (humanities and fine arts general education, literature selective; prerequisites: WRIT 1102 with a C- or better)

LITR 3300 Mental Health and Illness in Literature (3 Cr.)

This course focuses on the ways that literature reflects, informs and shapes our understanding of mental health and illness as identifiable states and conditions. Students will read and write analyses of a wide range of literary texts to develop critical insights into the concepts of mental health and illness as they have developed over time to inform current discourse. The course helps students learn to connect the ideas of health and illness to the larger aesthetic, cultural and philosophical contexts that literature inevitably engages. (humanities and fine arts general education, health humanities selective, literature selective, writing intensive; prerequisites: WRIT 1102 with a C- or better; LITR 22XX with a C- or better preferred)

LITR 3310 Comics and Conflict (3 Cr.)

This writing intensive course analyzes the portrayal of cultural conflict in comics. Students will learn to critically reflect on conflict and violence in a number of cultural and social contexts and will learn to read both verbal and visual texts critically. (humanities and fine arts general education, health humanities selective, literature selective, writing intensive; prerequisites: WRIT 1102 with a C- or better; LITR 22XX with a C- or better preferred)

M

MATH 1000 College Algebra (3 Cr.)

This course will use graphical, numerical and symbolic representations to review and reinforce the algebra skills necessary for success in precalculus, calculus and other future courses. Topics include: linear equations and inequalities; functions, graphs and applications; polynomials and polynomial functions; rational expressions, equations and functions; radical expressions, equations and functions; quadratic equations; and exponential functions and logarithmic functions. Format: lecture and discussion. (mathematical sciences general education; prerequisites: minimum score of 22 on the MACT or instructor approval)

MATH 1100 Precalculus for Health Professionals (3 Cr.)

This course will use graphical, numerical and symbolic representations to investigate and apply the basic properties of linear, quadratic, polynomial, logarithmic, exponential, rational and trigonometric functions. Students will also refresh the algebra skills necessary for success in calculus and other future courses. Format:

lecture and discussion. (mathematical sciences general education; prerequisites: MATH 1000 with a grade of C- or better, or a minimum score of 24 on the MACT, or instructor approval)

MATH 1105 Introduction to Statistics (3 Cr.)

The following concepts and statistical techniques are included: organization, presentation and description of quantitative data (graphical methods and numerical methods); probability and distributions; statistical inferences (interval estimation and hypothesis testing); and correlation and regression. (mathematical sciences general education; prerequisites: minimum score of 22 on the MACT or instructor approval) (restrictions: cannot also receive credit for MATH 1120)

MATH 1110 Applied Calculus for Health Professionals (3 Cr.)

This course will cover the basic concepts of analytic geometry and calculus with a major emphasis on both differential and integral calculus and their applications to the health professions. Format: lecture and discussion. (mathematical sciences general education; prerequisites: MATH 1100 with a grade of C- or better, or a minimum score of 27 on the MACT, or instructor approval)

MATH 1120 Statistics for the Health Sciences (3 Cr.)

This course introduces fundamental concepts and methods of statistics with emphasis on the application of statistical principles and methods to the assessment and interpretation of statistical evidence. It includes an introduction to descriptive statistics, basic probability theory, statistical estimation, hypothesis testing and regression. Statistical analysis using a statistical software package is introduced. Format: lecture and discussion. (mathematical sciences general education; prerequisites: MATH 1100 with a grade of C- or better, or a minimum score of 27 on the MACT, or instructor approval) (restrictions: cannot also receive credit for MATH 1105)

MATH 1211 Applied Calculus II (3 Cr.)

This course is a continuation of MATH 1110. Topics include: the definition and interpretations of the integral, basic techniques for computing anti-derivatives, an introduction to multi-variable calculus and optimization for functions of several variables, an introduction to differential equations and applications to chemistry and the health sciences. (STEM selective; prerequisites: MATH 1110 with a grade of C- or better)

MGMT 4100/MGMT 4400 Public Health Fundamentals in Pharmacy (3 Cr.)

This course provides an overview of public health issues related to pharmacy and the pharmaceutical needs of populations. The scope of the class includes national and global concerns. Topics include pharmacy administration topics within a public health context: social marketing, health care systems, health promotion, disease prevention, epidemiology, ethics, culture, law, health education and disaster management. The class format includes the review of current literature and group development of public health research proposals. (prerequisites: none) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

MGMT 5100 Pharmacy Leadership and Change (3 Cr.)

This course is an introduction to the study of organizational behavior within the context of the health care system. Students who successfully complete this course will understand how organizational behavior theory can be used to improve their personal effectiveness and the delivery of patient-centered care. Current behavioral science topics, including perception, personality, cultural sensitivity, emotional intelligence, motivation, leadership, group behavior and organizational change are examined to develop strategies for improving effectiveness at the personal, group and organizational level. (prerequisites: none) (restrictions: Professional Year 1 status)

MGMT 5200 Health Systems Management: Financial and Economic Aspects (4 Cr.)

This course acquaints students with the basic principles of financial and economic analysis applied to health systems, with special emphasis given to community and hospital pharmacies. Topics include: financial analysis, inventory control, breakeven analysis, cost allocations, reimbursement, health economics, health insurance,

managed health care, pharmacoeconomics and health care reform. Case studies encourage active learning and problem-solving. (prerequisites: none) (restrictions: Professional Year 1 status)

MGMT 6100 Pharmacy Law (2 Cr.)

Pharmacy law is a basic administrative course which is required as a part of the pharmacy curriculum. The primary purpose of this class is to prepare students to take and pass the law portions of their board examinations and state licensure processes. We will examine the nature and scope of the law with focus on how the law impacts and regulates the practice of pharmacy. Students will learn the governmental framework within which pharmacy is practiced, as well as acquire an understanding of the laws applicable to pharmacists. These legal principles are intended to allow pharmacists to protect the public interest, including their patients' well-being. Students will become prepared to examine and analyze these laws and apply these principles to the daily decision-making in the practice of pharmacy. (prerequisites: none) (restrictions: Professional Year 1 status)

MHUM 3301 Liberal Arts Theory Seminar (3 Cr.)

Junior seminar is a 3-credit course taken in the spring of the junior year by students who seek a stand-alone medical humanities degree. The course provides advanced instruction in the theory and conventions of liberal arts and science research to provide students with the structure and support needed to formulate a project proposal before the end of the semester. Three credits will be earned through weekly participation in the Junior Seminar: Theoretical Foundations, led by the junior seminar course coordinator. Subsequent courses in the seminar series will address methodology and practice largely through individual work with the student's faculty project mentor, which the student should choose by the end of seminar I. (prerequisites: none; restrictions; junior year status in declared medical humanities major)

MUSI 1100 Music Appreciation (3 Cr.)

Music is integral to the human experience, but its ubiquity in modern society has relegated melodious sounds to the background of our perception, which can lead to a deficiency in true appreciation for this creative and expressive medium. This humanities and fine arts elective serves as an introduction to music, providing students with knowledge and skills that can enhance the appreciation of all types of music. Of particular import is an emphasis on active, critical listening. Using student- and instructor-selected recordings, students will learn how to aurally identify musical and structural elements. Comparison to popular genres will help students develop a deeper understanding of, and appreciation for, art music in the Western canon, as well as music from around the world. (humanities and fine arts general education; prerequisites: none)

MUSI 1221-1222 Concert Band (0-1 Cr.)

The College's concert band is a performing instrumental ensemble open to students, faculty and staff who enjoy making music. The goals of the course include improving instrumental performance technique and musicianship, and gaining exposure to a wide variety of repertoire ranging from the Renaissance through modern music. This is a class participation and performance oriented course in which we continuously strive for our highest possible musical aesthetic. Previous instrumental music experience, as well as the ability to read music, is required. Members must provide their own instruments. (humanities and fine arts general education, free elective)

MUSI 1231-1232 Royal Chorale (0-1 Cr.)

The Royal Chorale is a performing vocal ensemble open to students, faculty and staff who enjoy singing. The goals of the course include improving choral vocal technique, and gaining exposure to a wide variety of repertoire ranging from the Renaissance through modern music. This is a class participation and performance oriented course in which we continuously strive for our highest possible musical aesthetic. Previous music experience is preferred, but not required. (humanities and fine arts general education, free elective)

MUSI 1242 Applied Music: Music Lessons (1 Cr.)

Applied-lesson study provides a one-on-one opportunity for students who would like to receive private music

instruction. The goals of these lessons are to enhance the student's technical, musical and performance abilities within the context of individual practice, including but not limited to technical studies, individual listening and repertoire appropriate to the level and needs of that student. Some previous music experience and a basic level of skill – as determined by the instructor – is expected. Students should have had some experience with the basics of musical notation. Concurrent participation in an appropriate College music ensemble and permission of the instructor is required. (humanities and fine arts general education, free elective)

MUSI 3310 Music and the Brain (3 Cr.)

This course serves as an introduction into the areas of music psychology and music therapy, with an emphasis on the cognitive neuroscience of music. Students will study the theories on the origin of music as aspects of human behavior, the physics of sound, the human perception of music, the connection of music and emotion and the effect of music on the brain. Research articles from peer reviewed journals will supplement course materials to help students form objective viewpoints on various topics in the aforementioned fields of study. (social and behavioral science general education, health humanities selective, social science selective; prerequisites: MATH 1105 or MATH 1120 and PSYC 2210 with a C- or better)

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PGEL 4000 Advanced Histology (3 Cr.)

The focus of this course is to use a systemic approach to learn and understand the details of histology. Histologists believe that the microarchitecture of tissues is the foundation on which physiology and pathophysiology are built. Topics to be studied include the specialization of cells and intercellular connections, the classification of the histological categories, the microarchitecture of tissues within organs, and the functional and structural interrelationship of the tissues. References to clinical evaluations made using pathology of tissues will be incorporated into the content while studying normal tissue structure. Format: lecture and laboratory. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)

PGEL 4001 Introduction to Data Science (3 Cr.)

In this introductory course, students will learn fundamental aspects of computer programming necessary for conducting scientific data analysis and research. By the end of the course students will be able to use these tools to import data into R, perform analysis on that data, and export the results to graphs, text files and databases. By learning how to get the computer to do their work for them, students will be able to do more science faster. The course will be taught using R and SQLite, but the concepts learned will easily apply to all programming languages and database management systems. No background in programming or databases is required. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Research

PGEL 4100 Nutrition for Pharmacists (3 Cr.)

A lecture and discussion elective, this course will provide students with a background in general nutrition that will inform them about the role of nutrition and good health. This course will focus on the positive and negative effects that various types of food choices have on health. This course does not include clinical nutrition, but should provide sufficient background information to foster comprehension of the role of nutrition in managing disease states when this material is taught in subsequent pharmacy courses. After successfully completing this course, students should be able to analyze a diet to determine its nutritional merit, evaluate their own diet for strengths and weaknesses, advise others on the components of a good diet, demonstrate the connections between health and disease and diet, evaluate the quality of nutrition information available in the media, understand the factors that influence dietary choices, and understand the long term consequences of our current unsustainable food production methods. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status)

PGEL 4101 Illness, Identity and Inequality in U.S. History (3 Cr.)

This course examines the historical role that social identity has played in mediating the delivery and experience of health care in the U.S. It traces changes over time in the experience of American patients whose identities have been filtered through the social categories of gender, race or ethnicity, sexuality, class and religion. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status)

PHAR 1102 Introduction to Health Care (2 Cr.)

This course provides an overview of the health care system, focusing on basic concepts in patient-centered care, the health care system and the health of the public. The class will help students understand various health care settings, different health care professional roles and activities in these settings, and career paths available. (prerequisites: none)

PHAR 4112 Introduction to Patient Care (4 Cr.)

This Professional Year 1 course is the first in the integrated pharmacotherapy course series and provides the foundation for subsequent courses in the series. Themes of this course will include introduction to patient care concepts, health and wellness, disease prevention and screenings, principles of self-care with emphasis on musculoskeletal pain and dermatology. (prerequisites: BIOL 4101, PHAR 1102, PHRC 4101, PHSC 4101 with a C- or better; corequisites: BIOL 4100 and PHPR 4112) (restrictions: Professional Year 1 status)

PHAR 5121 Integrated Pharmacotherapy: Cardiology (5 Cr.)

This course is designed to prepare the student to care for patients with cardiovascular disease by integrating pathophysiology, pharmacology, medicinal chemistry and therapeutics. Cardiovascular disease topics include hypertension, hyperlipidemia, peripheral artery disease, dysrhythmias, stroke, coronary heart disease, heart failure and thromboembolism. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 4112, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 5121)

PHAR 5131 Integrated Pharmacotherapy: Pulmonary (2 Cr.)

The pulmonary module is the third in a series of 12 integrated pharmacotherapy modules that is designed for pharmacy students to develop a broad understanding of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetic and pharmacotherapy in major areas of pulmonary disease states. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 4112, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 5121)

PHAR 5142 Integrated Pharmacotherapy: Endocrinology (3 Cr.)

The endocrinology course is the fourth in a series of 12 integrated pharmacotherapy courses that is designed for student pharmacists to develop a broad understanding of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics and pharmacotherapy in major areas of endocrinology. This course is a three credit-hour course in the first half of the spring semester of the second professional year. This course focuses on the care of patients with diabetes mellitus and other common endocrine disorders. It prepares students to serve as responsible, professional, efficient and effective providers of drug information to health care providers, patients and their caregivers. This team-taught, interdisciplinary course provides students with the opportunity to learn and apply concepts using a problem-based approach with emphasis on the integration and application of fundamental principles to specific clinical situations. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5121, PHAR 5131, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 5132)

PHAR 5152 Integrated Pharmacotherapy: Nephrology (3 Cr.)

This course prepares students to serve as responsible, professional, efficient and effective care providers to patients with renal disorders and related conditions at an intermediate level. It integrates the pharmacology and medicinal chemistry of relevant medications with the pathophysiology and therapeutics of renal diseases and related conditions. Students will have opportunities to expand their knowledge, skills, attitudes, values

and habits and practice the abilities needed to provide evidence-based, patient-centered care. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5121, PHAR 5131, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 5132)

PHAR 6161 Integrated Pharmacotherapy: Infectious Diseases (4 Cr.)

This Professional Year 3 course prepares students to serve as responsible, professional, efficient and effective care providers to patients with common infectious diseases. This course is one in a series of 12 integrated pharmacotherapy courses that is designed for student pharmacists to develop a broad understanding of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetic and pharmacotherapy in major areas of infectious disease (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5142, PHAR 5152, PHRC 4101, PHRC 5131, and PHSC 4101 with a C- or better; corequisites: PHPR 6141)

PHAR 6171 Integrated Pharmacotherapy: Critical Care (2 Cr.)

This course emphasizes integrating principles of pathophysiology, pharmacology, medicinal chemistry and pharmacotherapeutics (including self-care and pharmacogenomics) in the evidence-based and patient-specific treatment of critical care disease states. Student pharmacists will practice patient-centered care as described in the Pharmacists' Patient Care Process articulated by the Joint Commission of Pharmacy Practitioners as depicted in the integrated pharmacotherapy series syllabus. Student pharmacists will hone knowledge, skills, attitudes, values and habits related to collecting and assessing patient data; performing comprehensive patient and disease assessment; developing, implementing, interpreting and evaluating care plans; and providing ongoing coordinated or transitional care services in the area of critical care as appropriate. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5142, PHAR 5152, PHRC 4101, PHRC 5131, and PHSC 4101 with a C- or better; corequisites: PHPR 6141)

PHAR 6181 Integrated Pharmacotherapy: Hematology and Oncology (2 Cr.)

This course series emphasizes integrating principles of pathophysiology, pharmacology, medicinal chemistry and pharmacotherapeutics (including self-care and pharmacogenomics) in the evidence-based and patient-specific treatment of hematology and oncology. Practice management principles will also be integrated. Student pharmacists will practice patient-centered care as described in the Pharmacists' Patient Care Process articulated by the Joint Commission of Pharmacy Practitioners as depicted below. Student pharmacists will hone knowledge, skills, attitudes, values and habits related to collecting and assessing patient data; performing comprehensive patient and disease assessment; developing, implementing, interpreting and evaluating care plans; and providing ongoing coordinated or transitional care services in the area of hematology/oncology as appropriate. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5142, PHAR 5152, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 6141)

PHAR 6191 Integrated Pharmacotherapy: GI and Liver (2 Cr.)

This Professional Year 3 course prepares students to serve as responsible, professional, efficient and effective care providers to patients with common GI/Liver disorders. The IP-GI/Liver course is one in a series of 12 integrated pharmacotherapy courses that is designed for student pharmacists to develop a broad understanding of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetic and pharmacotherapy in major areas of GI/Liver. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 5142, PHAR 5152, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 6141)

PHAR 6202 Integrated Pharmacotherapy: Neurology and Psychiatry (5 Cr.)

This Professional Year 3 course prepares students to serve as responsible, professional, efficient and effective care providers to patients with common neurology and psychiatry disorders. This neurology and psychiatry course is the eleventh in a series of 12 integrated pharmacotherapy courses that is designed for student pharmacists to develop a broad understanding of

pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetic and pharmacotherapy in major areas of neurology and psychiatry. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 6161, PHAR 6181, PHAR 6191, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 6152)

PHAR 6212 Integrated Pharmacotherapy: Rheumatology (1 Cr.)

This course is designed to prepare the student to care for patients with rheumatologic diseases by integrating pathophysiology, pharmacology, medicinal chemistry and therapeutics. Rheumatologic disease topics include: osteoarthritis, rheumatoid arthritis and gout. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 6161, PHAR 6181, PHAR 6191, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 6152)

PHAR 6222 Integrated Pharmacotherapy: Special Populations (3 Cr.)

This Professional Year 3 course prepares students to serve as responsible, professional, efficient and effective care providers to pediatric, geriatric and women's health patients. Integrated Pharmacotherapy: Special Populations is one in a series of 12 integrated pharmacotherapy courses that is designed for student pharmacists to develop a broad understanding of pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics and pharmacotherapy in common areas for these populations and learn how to identify, utilize and interpret appropriate resources in the care of these populations. (prerequisites: BIOL 4100, BIOL 4101, BIOL 4200, PHAR 6161, PHAR 6181, PHAR 6191, PHRC 4101, and PHSC 4101 with a C- or better; corequisites: PHPR 6152)

PHED 1100 Fitness and Conditioning (1 Cr.)

This course provides the knowledge and skills to measure and assess one's physical performance. Using this information, students develop a personalized fitness program. (free elective) (restrictions: good physical health and a signed waiver)

PHED 1110 Leadership in Collegiate Athletics (1 Cr.)

Intercollegiate athletic participation enhances the education and development of students through competitive sports. Competitive sports are consistent with the philosophy, mission and goals of the College. Those actively involved in intercollegiate sports activities acquire principles of sportsmanship and learn fair play, honesty and integrity from amateur athletic competition. In addition, visibility of student-athletes presents an opportunity to demonstrate character development. Designing and leading a team service project enables students to demonstrate servant leadership, teamwork, responsibility, respect and integrity. Benefits of course-related work extend to nonparticipating students, faculty, staff, alumni and the community. (free elective) (restrictions: must be a member in good standing on a varsity roster)

PHIL 1100 Introduction to Ethics (3 Cr.)

This course introduces students to foundations and methods for making ethical decisions, particularly in the various professional environments in health care. Students will explore both the ethics of character (the values and virtues required of a professional) and the ethics of action (making decisions regarding the best course of action when confronted by ethical conflicts). (humanities and fine arts general education; prerequisites: none)

PHIM 4110/PHIM 4300 Information Mastery I: Evidence-Based Medicine and Informatics (2 Cr.)

This Professional Year 1 course provides opportunities for students to learn and practice abilities needed to provide drug information as it relates to the provision of evidence-based, patient- and population-centered care. Students will also be introduced to informatics and will learn about the medication use process including computer applications and the pharmacist's role in that process. This course is the first in a 3-course information mastery sequence and serves as a primer on information retrieval, evaluation, interpretation and communication. (prerequisites: none; corequisites: PHSC 4101) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

PHIM 5122 Information Mastery II: Biomedical Literature Evaluation (3 Cr.)

This Professional Year 2 course provides opportunities for students to learn and practice abilities needed to critically analyze and apply relevant health sciences literature to answer specific patient-care and drug-related questions and provide evidence-based, therapeutic recommendations to health care providers or, when appropriate, the public. This course is the second in a three-course information mastery sequence and serves as a primer on literature evaluation, interpretation and communication. (prerequisites: PHIM 4110 with a C- or better)

PHIM 6131 Information Mastery III: Clinical Applications (2 Cr.)

This course is the third in the 3-course information mastery sequence and serves as a capstone experience for information retrieval, evaluation, interpretation and communication. This Professional Year 3 course provides opportunities for students to learn and practice abilities needed to find and evaluate health-care-related biomedical literature in order to provide evidence-based responses to patients and other health care providers. Students will also build on informatics concepts from the Information Mastery I course and will learn about the medication use process including computer applications and the pharmacist's role in that process. (prerequisites: PHIM 5122 with a C- or better)

PHPR 4112 Pharmacy Practice Skills Lab I (1 Cr.)

This is the first in a sequence of courses in which students will apply content from the integrated pharmacotherapy sequence and develop important, necessary skills to become a patient-centered care giver and medication-use manager. This course will introduce and emphasize principles of effective pharmacist-patient oral communication. Student pharmacists will perform comprehensive medication and medical histories, assess and resolve medication-related problems and communicate brief, clear, patient-specific educational messages related to medications, healthy behaviors, self-care and health screening results. Students will take on the pharmacist role in prescription processing and apply systemic quality improvement principles to identify, prevent and resolve common prescription and processing errors. (prerequisites: PHRC 4111 with a C- or better; corequisites: MGMT 4100 and PHAR 4112) (restrictions: Professional Year 1 status)

PHPR 5121 Pharmacy Practice Skills Lab II (1 Cr.)

This is the second in a sequence of courses in which students will apply content from the integrated pharmacotherapy sequence and develop important, necessary skills to become a patient-centered care giver and medication-use manager. This course will emphasize principles of effective pharmacist-patient oral communication and introduce and emphasize principles of written pharmacist-patient communication and oral and written pharmacist-provider communication. Student pharmacists will perform medication and medical histories, assess and resolve medication-related problems and communicate brief, clear, patient- and provider-specific educational messages related to medications, medication administration, disease-state management, self-care and healthy behaviors. Students will build on their introductory skills in prescription processing and dispensing, be introduced to patient assessment and patient education on disease state management and medication administration, and practice communicating with patients and providers in both written and oral communication activities. Additionally, students will be introduced to sterile compounding and medication safety concepts. (prerequisites: PHPR 4112 and PHRC 4122 with a C- or better; corequisites: PHAR 5121 and PHAR 5131)

PHPR 5132 Pharmacy Practice Skills Lab III (1 Cr.)

This is the third in a sequence of courses. Students will apply content from the integrated pharmacotherapy sequence and develop important, necessary skills to become a patient-centered care giver and medication-use manager. This course will introduce and emphasize principles of effective pharmacist-patient oral communication and foundational skills for life-long learning. Student pharmacists will perform duties of prescription processing, comprehensive medication and medical histories, physical assessments and patient education for medications, devices, healthy behavior and self-care as it relates to endocrine and renal disorders. (prerequisites: PHPR 4112 and PHPR 5121 with a C- or better; corequisites: PHAR 5142 and PHAR5152)

PHPR 6141 Pharmacy Practice Skills Lab IV (1 Cr.)

This is the fourth in a sequence of courses in which students will apply content from the integrated pharmacotherapy sequence and develop important, necessary skills to become a patient-centered care giver and medication-use manager. This course will emphasize principles of effective pharmacist-provider written communication and introduce and emphasize principles of oral pharmacist-provider communication. Students will build on their introductory skills in prescription processing and dispensing, be introduced to patient assessment and patient education on disease state management, and medication administration, and practice communicating with providers in both written and oral communication activities. Students will build on their previously introduced skills of sterile compounding and ultimately be assessed on their ability. Students will also practice and be assessed on their ability to process inpatient prescription orders. Students will be expected to apply previous knowledge related to kinetics to clinical scenarios involving dosing and monitoring of antimicrobials. (prerequisites: PHPR 4112, PHPR 5121, and PHPR 5132 with a C- or better; corequisites: PHAR 6161, PHAR 6171, PHAR 6181, and PHAR 6191)

PHPR 6152 Pharmacy Practice Skills Lab V (1 Cr.)

This is the fifth in a sequence of courses in which students will apply content from integrated pharmacotherapy sequence and skills lab I-IV to develop important, necessary skills to become a patient-centered care giver and medication use manager. This course will emphasize principles of effective oral communication (patient and provider) and foundational skills for life-long learning. Student pharmacists will perform duties of prescription processing, problem-focused patient interviews and patient education for medications, healthy behavior and self-care as it relates to rheumatologic, neurologic, psychiatric and special population disorders. (prerequisites: PHPR 4112, PHPR 5121, PHPR 5132, and PHPR 6141 with a C- or better; corequisites: PHAR 6202, PHAR 6212, PHAR 6181, and PHAR 6222)

PHRC 4101/PHRC 4300 Pharmacy Calculations (1 Cr.)

This is the first course in the pharmaceutics sequence and provides the foundational abilities required for pharmaceutics I and II. Students are introduced to the theoretical and practical aspects of basic pharmacy calculations involved in the preparation of medication orders and prescriptions. As a member of the health care team, pharmacists are expected to accurately perform calculations to achieve safe and effective therapeutic outcomes in a variety of pharmacy practice settings. Topics include percents, ratio strength, milliequivalents/milliosmoles, alligation, isotonicity, aliquots and dosing. Format: lecture and discussion. (prerequisites: none) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

PHRC 4111/PHRC 4401 Pharmaceutics I (1 Cr.)

This course will focus on the rational design of pharmaceutical solutions. It includes physicochemical concepts of solutions such as colligative properties, ionic equilibria, solubility, dissolution and partitioning. Within these concepts, examples of pharmaceutical solutions and roles of excipients will be discussed. Beyond a knowledge base, some basic compounding skills for preparing pharmaceutical solutions will be introduced during the laboratory session. (prerequisites: none; corequisites: PHRC 4101/4300) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

PHRC 4122/PHRC 4402 Pharmaceutics II (4 Cr.)

This course will focus on the rational design of drug dosage forms, such as dispersed systems, semisolids, solids and injectables. Key chemical and physical properties of the drug and excipients will be discussed to rationally design dosage forms. Basic compounding skills for preparing drug dosage forms will be introduced during the laboratory session. (prerequisites: PHRC 4101/4300 and PHRC 4111/4401 with a C- or better) (restrictions: Professional Year 1 or senior year status in declared pharmaceutical sciences major)

PHRC 5131 Biopharmaceutics and Pharmacokinetics (3 Cr.)

This course will focus on the study of the rate processes involved in drug absorption and disposition. Instruction includes basic pharmacokinetic principles necessary for understanding individualized dosing regimens as well as a discussion of the effects of the physicochemical properties of the drug, route of administration and dosage form (including traditional and novel drug delivery systems) on drug bioavailability and therapeutic effectiveness. The course provides practical experience in solving problems using pharmacokinetic parameters obtained from actual patient data to design intravascular and extravascular multiple and single dosage regimens. (prerequisites: PHRC 4111, PHRC 4122, and PHSC 4101 with a C- or better)

PHSC 4101/PHSC 4400 Principles of Drug Action (4 Cr.)

This course introduces students to the general principles that govern pharmacotherapy. This course provides students with the foundational knowledge and skills essential for understanding, applying and evaluating the chemical and pharmacological concepts that ultimately relate to the physicochemical properties of drugs and their pharmacokinetic and pharmacodynamic behaviors. Considerable emphasis is placed upon learning the chemical structures and pharmacological properties, sites and mechanisms of action, metabolism and toxicology of important drug classes as a means for lifelong understanding of present and future pharmacological agents. Special attention is given to the extrapolation of basic concepts to understand existing and potential new mechanisms that might have impact on new drug therapies. The course expands upon the principles learned in organic chemistry, biochemistry, physiology and microbiology and prepares students for integrated pharmacotherapy courses. (advanced biology selective; prerequisites: BIOL 2231, BIOL 3240 and CHEM 3320 with a C- or better) (restrictions: Professional Year 1 or senior year status)

PHYS 1100 Astronomy: Mysteries of the Physical Universe (3 Cr.)

This course introduces concepts in astronomy to provide a better understanding of the mysteries of the physical universe. Students will learn how to answer questions such as: Is Pluto a planet? Are we alone in the universe? What happens inside a black hole? Is the universe expanding? What is dark matter? What is dark energy? Students will learn skills such as methods of modeling and communication through writing to explain why these questions don't yet have answers. Learning these skills will help prepare students for any career where the ability to understand and articulate a viewpoint is valued. (natural sciences general education; prerequisites: none)

PHYS 3200 Principles of Physics (4 Cr.)

This course introduces students to selected principles of classical physics, including motion, forces and torques, mechanical energy, fluid pressure and flow, sound, electricity, optics and nuclear physics. The course also helps students use those physical principles to deepen their understanding of biological, chemical and physiological phenomena covered in the student's first two years of the curriculum, and to explore therapeutic strategies that exploit physical phenomena. Format: lecture and laboratory. This course is intended for pharmaceutical sciences health humanities emphasis majors. (prerequisites: MATH 1100, BIOL 1111, and CHEM 1111 with a C- or better)

PHYS 3211 Physics I (4 Cr.)

An algebra-based introduction to classical and fluid mechanics and heat. Topics include kinematics, diffusion, Newton's laws of motion, torque and stability, mechanical energy, calorimetry and heat dissipation, rotational dynamics, fluid mechanics and their application to biology, physiology, chemistry and pharmacy. Laboratory activities are drawn from these topics and include an introduction to statistical and error analysis. Format: lecture and laboratory. (prerequisites: MATH 1110, BIOL 1111, and CHEM 1111 with a C- or better)

PHYS 3212 Physics II (4 Cr.)

An algebra-based introduction to acoustic, electromagnetic, optical and quantum phenomena. Topics include wave phenomena, sound and acoustic resonance, electric fields, circuits, light refraction, light diffraction, geometric optics, implications of electron wave theory, and their application to biology, physiology,

chemistry and pharmacy. Laboratory activities are drawn from these topics. Format: lecture and laboratory. (prerequisites: PHYS 3211 with a C- or better)

PPEL 4000 Hospital Pharmacy (3 Cr.)

This course provides students with an introduction to hospital pharmacy systems. This course will introduce the theories behind the concepts of drug distribution, intravenous admixtures, medication cabinet technology, computer applications, clinical services as well as the traditional services within the hospital setting and how they are related in the provision of pharmaceutical care. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Health System Pharmacy

PPEL 4001 Community Pharmacy (2 Cr.)

This course provides students with an introduction to community pharmacy. Students will become familiar with the basic concepts associated with practicing in a community setting, including, but not limited to: legal concepts, workflow, communication, third-party processing, patient care services and inventory control, while reflecting on their own experiences in and out of the classroom and how their experiences connect to the theoretical ideal of the profession in the community setting. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Community Care, Health Care Management, Professional Communication, Clinical Services

PPEL 4002 Diversity in Health Care Beliefs (3 Cr.)

This elective course will explore the belief systems and values which underlie a range of controversial health related-views on health and lifestyles, disease prevention and medical care, and end-of-life issues. Students will practice articulating disparate ideas using objective and accurate language. Differing viewpoints will be compared and contrasted and implications of those beliefs on an individual's health care choices will be discussed. Students will learn to differentiate beliefs based on misunderstanding and misinformation, for which the pharmacist should provide accurate information, versus those based on values, which should be respected. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Community Care, Disease State Management, Public Health

PPEL 4003 Database Management and Information Systems (3 Cr.)

This is the foundational course for the other electives in the informatics area of focus. This course will also be useful for students wishing to pursue a research area of focus. The purpose of this course is to facilitate students' understanding of information systems, security, data sources and other database structures. The course will begin with an overview of data manipulation methods using flat file, comma delimited, tab delimited and Excel files, and their integration into and out of table structures. It will cover the most commonly used terminology in the information fields, data hierarchy and examine security and other issues related to data management. It will then move into database creation, utilizing Access, to enable students to create their own databases and reports to provide realistic learning opportunities. (professional elective; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Informatics, Research

PPEL 4100 Health Literacy in the Community (3 Cr.)

This interprofessional course will focus on health literacy of indigent populations with opportunities to provide health information to residents at Gateway Homeless Shelter and education materials at an inner-city clinic. The students will develop knowledge and competence in the areas of interprofessional collaboration (along with nursing students), patient-centered care (including health literacy), care coordination and navigating the health system, all in the context of service to a homeless population. The majority of writing assignments will be weekly journals reflecting on civic engagement opportunities and will include personal thoughts, insights and emotions in response to those activities. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Public Health

PPEL 5000 Introduction to Drug Development (3 Cr.)

The intent of the Introduction to Drug Development elective is to familiarize Doctor of Pharmacy students to the complicated process that precedes marketing authorization of pharmaceuticals in the United States. Through various activities and assignments, students will be exposed to the data and strategy behind various sections of the U.S. Prescribing Information (USPI), as well as the integrated approach to drug development within a pharmaceutical company. This course will provide the opportunity for students to apply the knowledge and principles they have gained in courses such as pharmaceutics, pharmacology and therapeutics as they learn how all of these components are incorporated to advance a drug to market. Students who complete this course will have a greater appreciation for the pharmaceuticals they recommend, dispense and on which they counsel patients. (professional elective; prerequisites: PHAR 5142, PHIM 5122, and PHPR 5132 with a C- or better)
Focus Areas: Research

PPEL 5001 Introduction to Nuclear Pharmacy (2 Cr.)

Basic concepts of radiation, detection of radioactivity and the production and quality control of certain adiopharmaceuticals. The localization and biochemical fate of major diagnostic radiopharmaceuticals and public health aspects of radiation. Emphasis is placed on the use of radioisotopes in medicine. Lectures two hours each week. (professional elective; prerequisites: none) (restrictions: Professional Year 2 status)

PPEL 5002 Advanced Pharmacotherapy I (2 Cr.)

This abilities-based elective course provides students the opportunity to enhance clinical decision-making skills and self-learning skills by focusing on complex pharmacotherapy cases and evaluation of primary literature and guidelines to promote effective abilities in assessing medical problems and assessing pharmacotherapy regimens, selecting and developing individualized patient-centered care plans utilizing the principles of evidence-based decision-making. Opportunities to observe and deliver a journal club presentation is provided. Course topics supplement and complement those taught in the integrated pharmacotherapy series for P2 Students and may change each year. (professional elective; prerequisites: PHAR 5121, PHAR 5131 and PHRC 5131 with a C- or better; corequisites: PHAR 5142 and PHAR 5152)
Focus Areas: Clinical Services, Disease State Management, Health System Pharmacy

PPEL 5003 Advanced Community Pharmacy (3 Cr.)

This professional elective course will build on IPPE 5123 (Introductory Pharmacy Practice Experience: Community Pharmacy). Students will integrate knowledge from current and previous courses and experiences and solve problems commonly faced in the community pharmacy setting. Topics covered include, but are not limited to, community pharmacy as a career path, roles and responsibilities of a community pharmacist, communication (patient and provider), self-care and nonprescription medications, pharmacy law, quality improvement and medication safety, third party reimbursement and human resources and personnel management. (professional elective; prerequisites: IPPE 5123 with a C- or better)
Focus Areas: Community Care, Health Care Management and Entrepreneurship.

PPEL 5004 Introduction to Residency Training (1 Cr.)

This course is designed to introduce the student to potential postgraduate training opportunities including residency and fellowship training. Students will learn about the structure of residency training programs, how to identify potential opportunities, what they can expect to gain by completion of a program, and the selection-match process. Students will learn what it takes to be competitive for such programs, including the proper development of a curriculum vitae, how to write a letter of intent and how to communicate with individuals in a program. (professional elective; prerequisites: PHAR 4112 with a C- or better)
Focus Areas: Clinical Service, Community Care, Health System Pharmacy

PPEL 5100 Primary Care (3 Cr.)

The practice of pharmacy is constantly evolving. It is more common-place than ever for dispensing pharmacists to step into more nontraditional roles that may include immunizer, medication reconciliation expert, drug information specialist and to provide medication therapy management (MTM). The purpose of this elective is to hone students' abilities in these areas by further advancing their skills in treating disease states seen commonly in an ambulatory care and primary care setting. (professional elective, writing intensive; prerequisites: none) (restrictions: Professional Year 2 status)
Focus Areas: Clinical Services, Community Care, Disease State Management

PPEL 6000 Advanced Pharmacotherapy II (2 Cr.)

This abilities-based elective course provides students the opportunity to enhance clinical decision-making skills and self-learning skills by focusing on complex pharmacotherapy cases and evaluation of primary literature and guidelines to promote effective abilities in assessing medical problems and assessing pharmacotherapy regimens, selecting and developing individualized patient-centered care plans utilizing the principles of evidence-based decision-making. Opportunities to observe and deliver a journal club presentation is provided. Course topics supplement and complement those taught in the integrated pharmacotherapy series for P3 students and may change each year. (professional elective; prerequisites: PHAR 6161 and PHAR 6171 with a C- or better)
Focus Areas: Clinical Services, Disease State Management, Health System Pharmacy

PPEL 6001 Clinical Cases in Infectious Disease (3 Cr.)

This course will introduce students to a variety of real-world, actual patient cases in infectious diseases. Cases will be presented by practicing infectious diseases and critical care specialists who were involved in the care of the actual patient cases to be discussed. Building upon knowledge and skills acquired in Integrated Pharmacotherapy: Infectious Diseases, this course will focus on enhancing student ability to select and recommend patient-specific pharmacotherapy and monitor for effectiveness and safety of therapy. Students will also gain exposure to and participate in nuanced clinical decision-making and communication through active discussions with peers and instructors. (professional elective; prerequisites: PHAR 6161 with a C- or better)
Focus Areas: Clinical Services, Disease State Management, Health System Pharmacy

PPEL 6002 Topics in Critical Care (2 Cr.)

This course emphasizes further development of principles of pathophysiology, pharmacology, medicinal chemistry and pharmacotherapeutics (including self-care and pharmacogenomics) in the evidence-based and patient-specific treatment of critical care disease states. Student pharmacists will practice patient-centered care as described in the Pharmacists' Patient Care Process articulated by the Joint Commission of Pharmacy Practitioners. Student pharmacists will hone knowledge, skills and attitudes, values, habits related to collecting and assessing patient data; perform comprehensive patient and disease assessment; develop, implement, interpret and evaluate care plans; and provide ongoing coordinated or transitional care services in the area of critical care as appropriate. (professional elective; prerequisites: PHAR 6171 with a C- or better)
Focus Areas: Clinical Services, Disease State Management, Health System Pharmacy

PPEL 6100 Global Infectious Disease (3 Cr.)

The purpose of the proposed course is to expose students to infectious diseases that are less-common in the U.S., but have a far-reaching global impact. Students will learn how to assess some important global infectious diseases, provide therapeutic and prophylactic recommendations, monitor drug therapy and disease state progression and learn more about the epidemiology of these diseases and what role national and global organizations have in their prevention and management. (professional elective, writing intensive; prerequisites: PHAR 6161 with a C- or better)
Focus Areas: Clinical Services, Disease State Management

PSEL 4000 Medicinal Herbs and Phytopharmacy (2 Cr.)

This course approaches topics on the most commonly used herbal drugs from a scientific viewpoint. The use of herbal drugs is studied according to disease state or folkloric use and legitimate medical applications are distinguished from quackery. The course centers on the medicinal constituents of the herbs, which forms the basis for intensive studies of interactions between herbal drugs and prescription drugs, toxicities and plant drugs as leads for new proprietary medicinals. (professional elective: prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Community Care, Disease State Management, Pharmaceutical Sciences

PSEL 4001 Advanced Drug Delivery Systems (2 Cr.)

This course will cover the principles of the emerging nanomedicine technology in drug delivery systems, physicochemical properties of nanomedicine, advantages and limitations of nanomedicine products and nanomedicine products currently available in the clinical setting and in the development process that may impact therapeutic outcome. This course will also allow students to have hands-on laboratory experiences on the preparation and evaluation of nanomedicine. (professional elective; prerequisites: PHRC 4122 with a C- or better; corequisites: PHRC 5131)
Focus Areas: Pharmaceutical Sciences

PSEL 4100 International Service Learning (3 Cr.)

The practice of pharmaceutical care requires not only knowledge and skills regarding drug therapies but also a caring attitude, and empathy and compassion for those to whom the practitioner renders service. This course provides students with a structured international service experience so that they can explore their values, particularly their attitudes toward service; gain experiential knowledge of the population they are serving; learn about public health and the operations of social and medical agencies; and develop a better understanding of patient-centered care. Through discussion sessions and frequent writing activities, students will clarify and develop their ideas and attitudes about service. (professional elective, writing emphasis; prerequisites: approval of instructor) (restrictions: Professional Year 1 status and students cannot also receive credit for PSEL 4103)
Focus Areas: Community Care, Disease State Management, Public Health

PSEL 4101 Pharmacoepidemiology (3 Cr.)

This course explores the principles and methods of pharmacoepidemiology. Students will learn the general concepts, analytic methods and applications of pharmacoepidemiology. The course will cover the topics such as causal inference, bias and effect modification; statistical methods to analyze and interpret data from various epidemiological study designs; and epidemiological techniques for designing, implementing, analyzing and interpreting pharmacoepidemiology studies. This course will help students to apply the epidemiologic concepts and techniques to evaluate the pharmacoepidemiology studies and formulate unique research questions and opportunities. (professional elective, writing intensive; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Health Care Management and Entrepreneurship, Public Health

PSEL 4102 Introduction to Pharmacy Entrepreneurship (3 Cr.)

This course is designed to acquaint the student with the requirements for small business ownership and prepare the student for the practical problems associated with initiating a retail enterprise. Emphasis is placed on the establishment of appropriate management procedures, estimates of capital requirements and the mechanics involved with the initial operation of a small business. (professional elective, writing intensive; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Health Care Management and Entrepreneurship

PSEL 4103 Topics in Pharmaceutical Care: Community Service (3 Cr.)

This course provides students with a structured community service experience so they can explore their values, particularly attitudes toward service; gain experiential knowledge of the population they are

serving; learn about the operations of social and medical agencies; and develop a better understanding of patient-centered care. Students schedule and prepare service activities, make weekly visits to patients and clients and reflect on their experiences during oral discussions and in written journals and essays. This course is composed of two hours of lecture and discussion, plus two to three hours of service activity weekly. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status and students cannot also receive credit for PSEL 4100)
Focus Areas: Community Care, Disease State Management, Public Health

PSEL 4104 Introduction to Pharmacoeconomics and Outcomes Research (3 Cr.)

This course is designed to acquaint the student with the principles and methods of pharmacoeconomics, the skills to critically evaluate pharmacoeconomic literature, the applications to health care decision-making and the process of designing a proposal for conducting a pharmacoeconomic study. This course will help students understand how pharmacists can have an important impact on the decision-making processes of health care institutions, managed care organizations, pharmaceutical companies and governmental agencies by providing an analysis of the cost of drug therapy and related services. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status)
Focus Areas: Health Care Management and Entrepreneurship

PSEL 4105 Writing for Health (3 Cr.)

Students who successfully complete this course will learn how writing about illness, loss and grief can improve health outcomes. Skills are developed through investigation of the health care literature, self-reflection, group discussions and written exercises. As an upper-level, professional writing emphasis elective, the assignments are structured to allow students to develop as self-directed, independent learners. (professional elective, writing emphasis; prerequisites: none) (restrictions: Professional Year 1 status)

PSEL 5000 Advanced Compounding (2 Cr.)

This course will provide advanced training in the art, science and technology of pharmaceutical compounding. It is a hands-on, laboratory-based course that will help students become proficient in contemporary compounding techniques and equipment. The focus is on the patient-centered results of compounding, including the preparation of the various drug products and evaluation of the safety and efficacy of each product for each patient. (professional elective; prerequisite: PHRC 4111 with a C- or better)
Focus Areas: Pharmaceutical Sciences

PSEL 5001 Principles of Toxicology (3 Cr.)

A professional elective course that introduces students to the general principles related to harmful effects of drugs and environmental toxins. It is focused on sources, biochemical and pharmacological properties, sites and mechanisms of toxicity, metabolism and effects on human organism of toxic substances. Particular emphasis is placed on mechanisms of toxin-induced cell damage and cell death, general aspects of prevention and treatment. The course expands upon the principles learned in biochemistry, physiology and principles of drug action or pharmacology. (professional elective; prerequisites: PHRC 4122 with a C- or better)

PSEL 6000 Action Research Planning (3 Cr.)

The purpose of this course is to facilitate students' planning of action research and to realize its value to them as researchers. After selecting a research topic of interest such as an issue related to patient care, drug therapy administration, effect of drugs, drug cost or drug availability, to name a few, students will conduct a review of pertinent literature related to the topic and design an appropriate research plan for their research setting. Students will conduct the necessary research and construct a detailed paper which includes rationale for the research project, review of literature, methodology for the research project and detailed results and discussion. This will be presented to classmates. (professional elective; prerequisite: PHIM 5122 with a C- or better)
Focus Areas: Research

PSYC 2210 Principles of Psychology (3 Cr.)

This course presents the basic principles of psychology to develop an evidence-based understanding of human behavior. Students integrate their knowledge of learning and cognition, individual differences and developmental changes with biological processes and social influences. Psychodynamic, humanistic, cognitive, behavioral and biological perspectives are presented to describe behavior and mental processes, including theoretical explanations of health and psychopathology. Students practice applying these concepts to specific examples in their experiences, novel situations and popular media. The fundamental link between the research and application of the principles of psychology is supported by an examination of empirical data in real-world settings. (social and behavioral science general education; prerequisites: none)

PSYC 2220 Developmental Psychology through the Lifespan (3 Cr.)

This course provides an introduction to the scientific study of human development through the lifespan, integrating the psychological, social and environmental, and biological influences on physical, cognitive and socioemotional development. Students practice identifying key concepts in developmental psychology and applying these concepts to specific examples in student life, case studies and popular media. This course provides a foundational knowledge base for developmental concepts and research-supported principles. This course builds upon the foundation of integrated learning and information literacy from Principles of Psychology and prepares students for subsequent courses in psychology and required courses in their degree program. (social and behavioral science general education, social science selective; prerequisites: PSYC 2210 with a C- or better)

PSYC 3300 Case Studies in Abnormal Psychology (3 Cr.)

This course explores the causes, symptoms and treatments of psychopathology, while students develop a deeper understanding of a selected psychological disorder through examining treatment research and a case study. Students will form a multifaceted understanding of psychopathology by studying behavioral, cognitive, social and biological influences that contribute to its development. Students will learn the symptoms that characterize psychological disorders in the current psychiatric diagnostic system. Through their research, students will identify evidence-based treatment practices, including both medication-based and psychosocial therapies. Students will apply this knowledge by examining a selected clinical case, evaluating relevant treatment research and exploring appropriate treatment options. Students develop information literacy, ethical reasoning and written communication skills in the context of an area of psychopathology of particular interest to the student. (social and behavioral science general education, health humanities selective, social science selective, writing intensive; prerequisites: PSYC 2210 with a C- or better)

PSYC 3310 Personality Theory and Case Studies (3 Cr.)

This course explores theoretical and research-based understanding of human differences. Students form a multifaceted understanding of personality by integrating psychodynamic, trait, humanistic, cognitive and behavioral perspectives to better understand human nature. Students read recent research, evaluate personality theories and apply this knowledge to selected case examples, integrating their understanding of different perspectives and developing their own model of personality theory as it relates to a given case. Students develop information literacy, written communication and integrative learning skills in the context of personality. (social and behavioral science general education, health humanities selective, social science selective, writing intensive; prerequisites: PSYC 2210 with a C- or better)

Q

R

Research Project (1 or 2 Cr.)

Before a student may register for a research project, a written proposal describing the project must be approved by the sponsoring faculty member and respective department chair. A student is allowed a maximum of two credit hours of research and special

projects per semester in each school. Students must summarize the accomplishments of the project by preparing a written report. A final exam is optional. No more than four credit hours of special projects and research projects will count toward each school's graduation requirements. (prerequisites: none)

S

Selected Topics (2 or 3 Cr.)

Selected topics courses may be offered by any faculty member with the approval of the respective department chair and curriculum committee. Selected topic courses are intended for students who wish to continue their studies of a discipline in which they have already taken one or more classes. (prerequisites: to be determined by instructor)

SEMR 1100 Foundations of Learning (2 Cr.)

This course is intended to assist students in their transition to life at the College. Students entering college for the first time are bombarded with numerous academic and life challenges which may interfere with their overall academic success. The sessions in this course are designed to improve students' academic and life skills through interactive exercises, classroom discussions, homework, presentations and a final project. The first section of the course will be completed the Friday, Saturday and Sunday before all other regular classes convene. The remainder of the course will be completed during the regular, weekly classes held during the fall semester. (prerequisites: none)

SOCI 2210 Principles of Sociology (3 Cr.)

The discipline of sociology studies links between people and their society. This course uses sociological knowledge to strengthen students' participation in their society. Emphasis is on understanding for application. Concepts such as socialization, conformity and deviance, groups and bureaucracies, social classes and stratification, social power and institutions, such as family and work, are tools to learn how social structures frame behavior. (social and behavioral science general education; prerequisites: none)

SOCI 3300 Social Gerontology (3 Cr.)

An examination of the dynamic relationships between an aging population and the society in which this aging occurs. The diversity of human aging is associated with self-concepts, reassessing one's life and striking a balance between past values and future opportunities. Where older persons live, their cultural backgrounds, their needs and resources are provided by society. Retirement, health consciousness, residence, spirituality, social and family life are some of the issues included in this course that require decisions which will result in active aging or aging in dependency. (health humanities selective, social science selective; prerequisites: PSYC 2210 and SOCI 2210 with a C- or better)

SOCI 3310 Chronic Illness, Death and Dying (3 Cr.)

This course examines the cultural, social and psychological dimensions of chronic, life-limiting illness, dying and death. Important areas to be included are the cultural implications and medicalization of chronic illness and death, cultural perceptions regarding death, suicide and individual expressions of grief and strategies of bereavement. (health humanities selective, social science selective; prerequisites: SOCI 2210 and PSYC 2210 with a C- or better)

SOCI 3320 Health, Biomedicine and Society (3 Cr.)

This writing intensive course examines the social meanings of health and illness as well as the social organization of biomedical institutions and encounters. Students will learn to read and critically evaluate sociological monographs and other technical literature. (social and behavioral science general education, health humanities selective, social science selective, writing intensive; prerequisites: SOCI 2210 and WRIT 1102 with a C- or better)

SOCI 3330 Sports and Society (3 Cr.)

Sociological theories guide exploration of the complex relationships between sports and society. Topics include age, gender and social class variations of spectators and participants, team versus individual sports, coaching, elite participation, media, social minorities, economic

and political influences. The ethics of competition and winning in sports is an important content of this course. Class discussions and written assignments will be instrumental to acquiring a personal value system toward sporting behaviors in our society. (health humanities selective, social science selective; prerequisites: SOCI 2210 and either PSYC 2210 or ANTH 2220 with a C- or better)

SOCI 3340 Drugs and Society (3 Cr.)

This writing intensive (WI) course provides a broad introduction to the sociology of drugs and their use. Students will analyze drug use and abuse as social, as opposed to medical or psychopathological, phenomena. Topics include the history of drug use and regulatory efforts; the epidemiology of drug use (including use of patterns related to specific drugs); the relationship between drug use and social inequality; sociological perspectives on drug abuse and addiction; and social responses to drug use, including laws and policies, harm reduction, prevention and treatment. Students will learn to read and critically evaluate sociological monographs and other technical literature. (health humanities selective; social science selective, writing intensive; prerequisites: SOCI 2210 and WRIT 1102 with a C- or better)

Special Projects (1 or 2 Cr.)

Special projects are to permit an in-depth study of an advanced topic within a specific discipline. Before a student may register for a special project, a written proposal describing the project must be approved by the sponsoring faculty member and respective department chair. Special projects are not to duplicate efforts in existing courses. A student is allowed a maximum of two credit hours of research and special projects per semester in each school. Students are to summarize the accomplishments of the special project by preparing a written report. A final exam is optional. No more than four credit hours of special projects and research projects will count toward each school's graduation requirements. (prerequisites: none)

WRIT 1101 The Effective Writer (3 Cr.)

This course teaches students to write clearly and substantively in a range of writing modes. The course introduces students to the forms and conventions of college-level writing and to the varying expectations of different readers. Toward these ends, it guides students to read carefully and critically, preparing them to make sense of challenging texts they will encounter throughout their academic careers and beyond. The central outcome of the course is to help students read and write more effectively. This course is a prerequisite for The Writer as Advocate and teaches essential foundational skills for subsequent writing assignments in other courses, including writing intensive courses. (written communication general education; prerequisites: none)

WRIT 1102 The Writer as Advocate (3 Cr.)

This course focuses on how writers use language to persuade and convince readers. Drawing on their understanding of the reader, context and content, students will draft and revise text strategically to accomplish specific purposes. Students will learn to write arguments that clearly define and soundly support their positions on an issue, and they will apply these skills in an academic research paper that demonstrates a deep understanding of a complex topic using carefully selected sources. The course teaches essential critical thinking and rhetorical skills for subsequent writing assignments in other courses, including writing intensive courses. (written communication general education; prerequisites: WRIT 1101 with a grade of C- or better)

WRIT 3300 Business Writing (3 Cr.)

This course focuses on improving communication skills by learning the forms and conventions of workplace writing. Assignments will include memos and letters responding to a variety of rhetorical situations (e.g., informative, persuasive, negative), proposals, reports, job application letters and résumés. The course will emphasize clarity, conciseness, organization, format, style, tone and mechanical correctness as well as expanding upon students' research and documentation skills. Peer response workshops will be required. (literature selective, writing intensive; prerequisites: WRIT 1102 with a grade of C- or better)

WRIT 3310 Writing in the Biomedical Sciences (3 Cr.)

This course introduces students to scientific literature and the unique conventions of writing in the sciences. Topics covered include: the principles of effective writing in the sciences, organization and structure of scientific literature, contents of each section, the economy of words, appropriate verbiage, visual presentation of data (graphs, tables and charts), ethics and proper citation. Students will receive instruction and engage in evaluating scientific research papers, practice writing sections of scientific research papers, evaluate and edit each other's work and compose a scientific research paper after having been provided complete and appropriate data. (advanced biology selective, STEM selective, writing intensive; prerequisites: BIOL 2231 and CHEM 1232 or CHEM 2314 with a C- or better)

WRIT 3320 Reviewing Scientific Literature (3 Cr.)

This course will examine the formats and audiences for formal scientific writing, especially as that writing applies to the health sciences. Aspects of what it means to be generally scientifically literate will be discussed. The focus of the course will be comparing and contrasting the conventions associated with scientific writing in different contexts including communication between research peers, communicating with a broader scientifically literate audience and communicating scientific findings to the general public. The course will include a discussion of how the conventions relate to perceived validity and reliability of publications. Students will choose a topic to investigate and practice various forms of writing about that topic including an annotated bibliography, analysis of a review article from the scientific literature and a comprehensive review of the topic for a general audience. (advanced biology selective, STEM selective, writing intensive; prerequisites: BIOL 2220, CHEM 1232 or CHEM 2314, MATH 1120, SOCI 2210, and HIST 2201 or HIST 2202 or HIST 3303 with a C- or better)

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APPENDIX

SCHOOL OF PHARMACY STUDENT PHARMACIST EXCUSED ABSENCE

Policy Applies To:

All student pharmacists – Professional Year 1 through Professional Year 3 (P1-P3) – enrolled in the professional program at the College and to faculty teaching in the School of Pharmacy.

IPPE courses taken during the fall and spring semesters will follow this policy. Professional Year 4 (P4) student pharmacists on advanced pharmacy practice experiences (APPE) and P2 and P3 student pharmacists completing introductory pharmacy practice experiences (IPPE) for Community and Health System must follow the excused absence policy in the Office of Experiential Education Manual and Policies.

Policy and Procedures

Introduction

The School of Pharmacy considers the events outlined below to be valid ones for the granting of an excused absence when a student pharmacist completes the process described with each type of excused absence request. If a student does not complete the process as described, the absence will not be excused. Requests for excused absences must be submitted in writing via email to the deansoffice@stlcop.edu (note: emailing the dean directly will significantly delay the response for an excused absence). Furthermore, if the required documentation is not submitted in a timely fashion, an excused absence may be rescinded. Students are expected to make up assessments, classes and other important activities. Students will be held responsible for mastery of material missed during an excused absence. It is the responsibility of the student to arrange a makeup plan with the course coordinator. For excused absences, faculty members will assign makeup work or reschedule exams, quizzes or other student assessments in a fair and equitable manner. However, student pharmacists should recognize that it may not be possible to make up all types of missed course activities (e.g., a group presentation, discussions, etc.). Makeup course activities or assessments may differ in format from the original activity or assessment, at the discretion of the course coordinator (e.g., essay, fill-in-the-blank, etc. rather than multiple-choice). Determination of the format of course makeup work or assessments or "dropping" a quiz, assignment or graded activity is always at the discretion of the course coordinators.

Student pharmacists may be excused from attending classes due to any of the reasons outlined below. However, if a student pharmacist misses more than a few class sessions and activities and examinations in a course, the course coordinator may refer the student to the Office of the Dean of Pharmacy.

An excused absence is an official release by the School of Pharmacy. A student pharmacist will not be penalized or disadvantaged academically for an excused absence. Course policy, even if noted in the course syllabus, does not supersede an official action by the School of Pharmacy to grant an excused absence for any of the valid reasons outlined below.

In rare cases involving extenuating circumstances student pharmacists may request an excused absence from the Office of the Dean of Pharmacy for reasons other than those listed below. Such requests will only be granted at the discretion of the dean. The dean's decision is final for excused absence requests not explicitly covered by this policy.

For student pharmacist absences from class that are not deemed as being excused, course coordinators will not be required to assign makeup work or reschedule exams, quizzes or other student assessments.

Excusable Absences

Below is a list of acceptable events, both anticipated and unanticipated, for being excused from class, including class sessions in which graded assignments, exams, quizzes and assessments are completed. Except where noted below, all requests for absences from class must be submitted to and approved by the Office of the Dean of Pharmacy. Requests must be submitted by email to deansoffice@stlcop.edu. Notification should occur before the beginning of a lab or class unless the student is physically unable to do so. The Office of the Dean will communicate excused absences to course coordinators. In some cases, as described below, the student pharmacist must also communicate the excused absence to course coordinators.

The Office of the Dean will keep records of all student pharmacist absences throughout the student's tenure in the professional program. Students submitting excessive absence requests will be reviewed and may be referred to student services, the professional conduct board, or may be asked to meet with the Dean of Pharmacy. Excessive absences may prevent approval of subsequent absence requests.

The primary obligation of student pharmacists should be to the academic program and to developing requisite knowledge, skills, attitudes, values, behaviors and abilities to successfully complete the program, student pharmacists are expected to minimize their time away from school.

A. Anticipated Events

1. Participation in Professional Development Activities

The School of Pharmacy encourages student pharmacists to become involved in professional organizations on campus as a way to develop their leadership skills and to gain an appreciation for the role that such organizations play within the pharmacy profession. Student pharmacists should consult with their professional organization advisor before planning to participate in professional development meetings.

Student pharmacists should strive to miss the least number of days possible in order to meet the requirements of the professional development activity. As the primary obligation of student pharmacists should be to the academic program, student pharmacists are expected to minimize their time away from school and not extend their trip beyond the professional meeting dates and necessary travel time. Participation in social events at meetings is not an appropriate reason to seek an excused absence.

To be excused from classes to attend local, national and international meetings, the following criteria must be met. The student pharmacist must be in good academic standing. Any student pharmacist on academic probation or identified as being at risk for poor academic performance will generally not be excused from classes. Students should contact the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) in advance of planning any meeting travel and attendance to confirm that they are in good academic standing and are not deemed as being at risk for poor academic performance.

The student pharmacist must provide to the Office of the Dean documentation in support of the request. Documentation may consist of conference and meeting registration, meeting agenda issued by the organization with student's presentation or participation specifically outlined, participation verification from a faculty, regional or national advisor.

Student pharmacists must inform course coordinators of their intent to participate in a meeting at least 30 days before their intended absence.

The student pharmacist must make arrangements with each of their course coordinators at least two weeks prior to the meeting to make up any course assignments or exams the student will miss while attending the professional meeting.

2. Religious Observance or Religious Holiday

If a student pharmacist's religious convictions dictate that they observe holidays or religious events not provided for in the College's calendar, special arrangements must be made in advance with the Office of the Dean of Pharmacy.

Student pharmacists seeking an excused absence for a religious observance are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) at the beginning of the semester (or as far in advance as possible) about their intent to observe a religious holiday. Student pharmacists should remind all affected course coordinators of the religious observance at least seven business days in advance (or as far in advance as possible) of the affected class sessions, including those class sessions in which exams, quizzes or other assessment activities are scheduled.

The particular accommodation for student pharmacists observing religious holidays may take into account the size of the class, the impact on class attendance and the regular course schedule. For example, when the impact on class attendance will be minimal, the faculty member may identify alternative assignments (e.g. individual paper or presentation) as opposed to adjusting the

regular course schedule (e.g. rescheduling a quiz or group presentation).

If a course coordinator makes a change to the course syllabus or schedule during the semester and that change subsequently impacts a student pharmacist's observance of a religious holiday, the student pharmacist should notify the course coordinator within two business days of the change in course schedule being announced to students.

3. Scheduled Medical Care, Procedures or Childbirth

When possible, scheduled medical procedures or routine follow-up appointments with health care providers for student pharmacists or for their dependents, spouses or parents should be planned to avoid conflict with course activities. When this is not possible, student pharmacists should consult with course coordinators about the best times to miss class. As soon as the date of a scheduled absence is known, student pharmacists must inform the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) about the date of the medical procedure or appointment and the estimated time away from school.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide documentation of a doctor's appointment, scheduled medical procedure, or hospital admission (but need not disclose the medical condition) to substantiate the excused absence. This documentation must be submitted to the Office of the Dean of Pharmacy as soon as possible but no later than the day the student returns to school.

4. Participation in NAIA College Athletic Competitions

Student pharmacists who are members of a college-sponsored athletic team and who are seeking an excused absence from courses to participate in a College-sanctioned athletic competition are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) at the beginning of the semester about their competition schedule. Student pharmacist athletes should remind all affected course coordinators of their competition schedule at least seven business days in advance of the affected class sessions, including those class sessions in which exams, quizzes or other assessment activities are scheduled.

If a course coordinator makes a change to the course syllabus or schedule during the semester and that change subsequently impacts student pharmacist athletes to participate in a College-sanctioned competition, the student pharmacist athlete should notify the course coordinator within two business days of the change in course schedule being announced to students.

Students should refer to the College's Athletics Handbook for detailed policies and procedures related to excused absences from classes.

This policy statement does not apply to student pharmacists who participate in College intramural or club sports or who wish to participate in athletic or other types of competition events that are not College-sanctioned.

5. Jury Duty or Required Court Attendance

Student pharmacists who are called to jury duty or who are required to appear in court or a court-related proceeding are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible and before a class session if they cannot attend class or any other required class activity because of jury duty or court attendance. If possible, attendance at court-related proceedings should be scheduled to not conflict with class meeting times or class activities.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide to the Office of the Dean documentation of the jury duty service commitment or court appearance to substantiate the excused absence.

6. Required Military Duty

Student pharmacists who are active-duty members of a branch of the U.S. military and are called to duty are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible and before a class session if they cannot attend class or any other required class activity because of military service.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide to the Office of the Dean, documentation of the active duty service commitment to substantiate the excused absence.

7. U.S. Naturalization Process

Student pharmacists who are in the process of becoming U.S. residents or citizens are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible and before a class session if they cannot attend class or any other required class activity due to participation in naturalization process related appointments. If possible, these appointments should be scheduled to not conflict with class.

8. Weddings

When possible, weddings (or special family events of comparable, singular importance) for student pharmacists or for their dependents, spouses or parents should be planned to avoid conflict with course activities. Student pharmacists should always weigh the priority of attending the wedding or special family event against the importance of attending class.

In cases where weddings or special family events have been scheduled and conflict with class attendance, student pharmacists must contact the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) at the beginning of the semester in which the wedding or special family event is scheduled or at least 30 days in advance of the wedding or special family event to receive an excused absence from class. Students should try to minimize time away from school and not extend travel beyond the day of the wedding or special family event whenever possible.

Student pharmacists should remind all affected course coordinators of their conflicting wedding or special family event at least seven business days in advance of the affected class sessions, including those class sessions in which exams, quizzes or other assessment activities are scheduled.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide documentation of the wedding or special family event to substantiate the excused absence. This documentation may be a wedding invitation, program, newspaper announcement or other similar document and must be submitted to the Office of the Dean of Pharmacy as soon as possible but no later than the day the student returns to school.

Excused absences in this category are not meant to cover family vacations or extended holidays.

B. UNANTICIPATED EVENT

1. Acute Illness or Injury

Student pharmacists or a representative are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible if they cannot attend class or any other required class activity due to an emergency medical procedure, childbirth, an acute self- limiting illness, exacerbation of a chronic illness or accident afflicting themselves or someone in their immediate family or care (e.g., parent, sibling, spouse or child).

As health care providers, pharmacists must be able to self-determine if it is safe and advisable to go to work, balancing their responsibilities to the patients they serve with keeping peers, colleagues and patients safe from communicable illnesses. Similarly, student pharmacists must also be able to self-determine if it is safe and advisable to attend class. Student pharmacists should make every effort to attend class as long as they are not contagious or severely ill. For example, a pharmacist experiencing a self-limiting headache that is treatable with over-the-counter medications would be expected to report to work, but a pharmacist experiencing a debilitating migraine might be excused from work.

If a student pharmacist has a short term acute illness, injury or illness less than two days, for which the student pharmacist sees a health care provider, the student pharmacist should submit documentation of that encounter in conjunction with the excused absence request.

The Office of the Dean may require confirmation of student injury or illness that is serious enough for a student to be absent from class for a period less than two business days.

For injury or illness that requires a student pharmacist to be absent from classes for two or more consecutive business days, the student must obtain a medical confirmation note from their health care provider unless confirmation is deemed unnecessary by the Office of the Dean of Pharmacy. The Student Health Center or an off-campus medical professional can provide a medical confirmation note only if medical professionals are involved in the medical care of the student. The medical confirmation note should contain the date and time of the illness and treatment and medical professional's confirmation of needed absence as well as the date the student is cleared to return to class. This note should be submitted to the Office of the Dean of Pharmacy as soon as possible (e.g., via fax of the note from the doctor's office, email a picture of the note) but no later than the day the student returns to school.

*Student pharmacists who have approved Americans with Disabilities Act (ADA) accommodations secondary to a medical or health condition should follow the policy and procedures as described in the College's Disability Support Program Student Handbook.

2. Accidents, Victim of a Crime or Other Similar Events

Student pharmacists are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as safely and feasibly possible if they cannot attend class or any other required course activity due to a car accident (major or minor), traumatic event or other similar event (e.g., fire or burglary at residence, theft of vehicle, etc).

Student pharmacists should submit a police report, insurance claim or report, repair bill or other related documentation (e.g., a date and time stamped photo of the vehicle or residential damage) to the Office of the Dean as soon as possible.

3. Death in the Family

In the event of the death of a parent, sibling, spouse, child or grandparent an excused absence from courses for three days up to and including the day of the funeral or memorial service will generally be allowed. Students may work with the Office of the Dean of Pharmacy on a case-by-case basis in situations where an extended absence may be warranted. An excused absence for the day of the funeral or memorial service may be granted in the case of the death of other close relatives.

Student pharmacists are responsible for notifying the Office of the Dean as soon as possible if they cannot attend class or any other required course activity due to attendance at a funeral or memorial service. This notification should occur before the class session or required course activity.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide documentation (e.g., obituary, funeral or memorial card or program or other documentation as available) to substantiate the excused absence in relation to the death of a family member to the Office of the Dean of Pharmacy.

4. Unsafe Travel Conditions to Campus

In cases where there are delays or closings at campus, the College's schedule will be modified as per the College's Inclement Weather Policy. Student pharmacists do not need to contact course coordinators or the Office of the Dean of Pharmacy if the College is altering its schedule based on the College's Inclement Weather Policy.

Student pharmacists should balance their professional responsibilities related to attending classes with their personal safety and use their best judgment when making decisions about traveling to campus.

When local weather conditions, such as snow or ice, affecting the student pharmacist's residence, but not the College's campus make travel dangerous, student pharmacists are responsible for notifying the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible and before a class session if they cannot attend class or any other course activity. Notification should be done in a safe manner. The School of Pharmacy strongly advises against texting or emailing while driving.

5. Travel Delay or Commuting Problem beyond Student Pharmacist's Control

The School of Pharmacy recognizes that when student pharmacists travel for personal or professional reasons,

that delays in travel (e.g., cancellation or delay of a flight) may prevent a student pharmacist from returning to campus as previously scheduled. In cases where there is an unexpected delay in travel, student pharmacists are expected to notify the Office of the Dean of Pharmacy (deansoffice@stlcop.edu) as soon as possible and before a class session if they cannot attend class or any other course activity. Student pharmacists will be excused from class attendance for up to two days in the event of an unforeseen travel delay requiring additional time to complete the travel.

This policy statement does not include extending holidays and errors in booking travel arrangements that create conflict with attending class sessions or scheduled exams, quizzes or other assessment.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide documentation of travel delay to substantiate the excused absence. This documentation may be a flight reservation and subsequent changed itinerary, or other pertinent travel documentation and must be submitted to the Office of the Dean of Pharmacy as soon as possible but no later than the day the student returns to school.

The School of Pharmacy recognizes that student pharmacists may commute to campus and may experience delays due to malfunction of an automobile or other mode of transportation. In such rare cases, student pharmacists are expected to notify the Office of the Dean of Pharmacy as soon as possible and before a class session if they cannot attend class or any other course activity.

For a missed examination, quiz or other type of assessment in a course, the student pharmacist must provide documentation of automobile malfunction to substantiate the excused absence. This documentation may be a repair bill, towing bill and other pertinent documentation and must be submitted to the Office of the Dean of Pharmacy as soon as possible but no later than the day the student returns to school.

Please note that falsification and misrepresentation of an absence request is considered an act of academic dishonesty and subject to review and action according to the St. Louis College of Pharmacy Academic Honor Code.

Responsibilities

POSITION / OFFICE / DEPARTMENT	RESPONSIBILITY
Student Pharmacists	• Submit all absence requests to the Office of the Dean via email to deansoffice@stlcop.edu as per this policy and in a timely manner. • Work with faculty to reschedule and complete makeup quizzes, exams and graded activities as per the discretion of the course faculty member.
Mary Pat Dejarnette Executive Assistant, Office of the Dean of Pharmacy	• Intake of student absence requests. • Verification of student eligibility for being excused. • Communicating excused absences with course coordinators and with students. • Record keeping of student absence requests
Dean of Pharmacy	• Final approval of all student absence requests.
Faculty	• Refer to or include this policy in course syllabi. • If absences are reported directly to you, refer the student to the Office of the Dean per this policy.

Policy Contacts

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