LIU Pharmacy

2026 - 2027
Professional Program & Graduate Catalog

75 DeKalb Avenue, Brooklyn, N.Y. 11201-5497

LIU Pharmacy General Information: 718-488-1234

www.liu.edu/pharmacy

Admissions: 718-488-1011

Pharm.D. email: bkln-pharmd@liu.edu | Graduate email: bkln-pharmacy-graduate-program@liu.edu

Notice to Students: The information in this publication is accurate as of September 1, 2026. However, circumstances may require that a given course be withdrawn or alternate offerings be made. Therefore, LIU reserves the right to amend the courses described herein and cannot guarantee enrollment into any specific course section. All applicants are reminded that the University is subject to policies promulgated by its Board of Trustees, as well as New York State and federal regulations.

The University reserves the right to effect changes in the curriculum, administration, tuition and fees, academic schedule, program offerings, modes and methods of instruction, and other phases of school activity, at any time, without prior notice. The University assumes no liability for interruption of classes or other instructional activities due to fire, flood, strike, war, epidemic, government action, or other force majeure. The University expects each student to be knowledgeable about the information presented in this bulletin and other official publications pertaining to his/her course of study and campus life. For additional information or specific degree requirements, prospective students should call the Office of University Admissions. Registered students should speak with their Success Coach.

TABLE OF CONTENTS

ABOUT LONG ISLAND UNIVERSITY 4
MIssion Statement 4
Vision 4
Motto 4
Founding Date 4
Carnegie Classification 4
Alumni 4
Athletics 4
Accreditation 4
University Policies 4
Title IX 4
University Grievance Policy 4
ABOUT LIU PHARMACY 7
Over 125 Years of Tradition 7
Mission, Vision and Values 7
Professional, Undergraduate and Graduate Degrees 7
Membership 7
Accreditation 7
LIU Pharmacy Publications 7
Pharmacy Student Organizations 7
LIU PHARMACY FACILITIES 10
Computer Laboratory 10
Pharmacy (Main Building) 10
Pharmacy Wet Lab Building 10
William Zeckendorf Health Sciences Center 10
LIU PHARMACY OFFICES AND SERVICES 11
Student and Professional Affairs 11
Student and Professional Activities 11
Division of Pharmaceutical Sciences 11
Division of Pharmacy Practice 11
Office of Experiential Education 11
Office of Assessment 11
Office of Interprofessional Education 12
Continuing Professional Education 12
Alumni Association 12
DIRECTORY 13
ACADEMIC CALENDAR 2026-2027 14
LIU BROOKLYN HONORS COLLEGE 17
ACADEMIC POLICY 18
Academic Responsibility 18
Student Academic Standing 18
Summer Sessions 18
Residency Policy 18
Grading and Grade Point Average 18
Dean's List 19
Attendance 20
Student Absence due to Religious Observance 20
Graduation Requirements 20
Degrees with Distinction 20
Academice Standards 20
Academic Probation 21
Academic Suspension 22
Academic Dismissal 22
Criminal Background and Drug Checks 23
Related Curricular Matters 25
STUDENT LIFE 26
Division I Athletics 26
Student Organizations 26
Student Government Association 26
LIU Cares 26
Residential Life 26
Campus Recreation and Intramurals 26
Student Code of Conduct 26
FACILITIES 28
Career Bar 28
Dining and Food Service 28
Downtown Brooklyn Speech-Language-Hearing Clinic 28
Esports Arena 28
Kumble Theater for the Performing Arts 28
Psychological Services Center 28
Wellness, Recreational and Athletic Center (WRAC) 28
Student-Run Businesses 28
Trading Floor 29
STUDENT SERVICES AND RESOURCES 30
Division of Student Affairs 30
Student Success 30
Disability Support Services 30
Student Veterans Resource Center 31
English Language Institute 31
International Student Services 31
Bookstore 31
Public Safety 31
Information Technology 32
Alumni Engagement 33

POLICIES & REGULATIONS AFFECTING STUDENTS 34
Standards of Professional Ethical Behavior 34
LIU Pharmacy Honor Code 34
LIU Pharmacy Violations of Standards of Professional and Ethical Behavior and Academic Integrity 35
Policy for Student Complaints Relating to Accreditation Council for Pharmacy Education (ACPE) Standards, Policies and Procedures 36
LIU Pharmacy Official Correspondence 36
LIU Pharmacy Picture Student Identification 36
TUITION AND FEES 37
Tuition and Fee Schedule 37
Housing and Meal Plan Schedule 37
Payment Plans 38
Financial Policies 39
FINANCIAL AID 42
Applying for Financial Aid 42
Awards 42
Policies 44
LIU BROOKLYN LIBRARY 48
PROFESSIONAL PROGRAM 49
PROFESSIONAL PROGRAM FOR THE DOCTOR OF PHARMACY 49
Introduction 49
Degree Requirements 49
ADMISSION 49
Application Process and Deadlines 49
Professional Phase of the Program 49
Technical Standards for Admission and Program Continuation 49
Transfer from Other Colleges of Pharmacy 50
International Applicants 50
Visiting Students 50
Readmission 50
New York State Immunization Law 51
The Profession of Pharmacy 52
Learning Outcomes 52
Entrustable Professional Activitie (EPAs) 53
Preprofessional Phase Course of Study 53
Professional Phase Course of Study 53
Bachelor of Professional Studies in Pharmaceutical Sciences 55
Pharm.D./MBA Shared Credit Program 56
Pharm.D./MPH Shared Credit Course of Study 57
Pharm.D./MS Shared Credit Programs 58
Co-Curricular Requirements 58
Interprofessional Education 59
Pre-APPE Competencies 59
Professional Course Descriptions 61
PHARM.D. PROGRAM QUALITY INDICATORS 72
On-time Graduation Rates 72
Pharmacist Licensing Examinations 72
Post-graduation Placements 72
Other Quality Indicators 73
ACADEMIC AWARDS 74
REGISTRATION 76
Enrollment 76
Adding or Dropping Courses 76
Withdrawal 77
Appeals for Late Drop or Withdrawal 77
Maintenance of Matriculation 78
Leave of Absence 78
Auditing of Courses 78
Transcript Requests 78
Administrative Matters 78
GRADUATE PROGRAMS 79
ADMISSION 79
Eligibility 79
Admission Procedures 79
Notification of Acceptance 79
International Students 79
Transfer of Credits 80
New York State Immunization Law 80
ADDITIONAL GRADUATE ACADEMIC POLICY 81
GRADUATION REQUIREMENTS 82
Thesis Option 82
Non-Thesis Option 82
Comprehensive Examination for Master's Students 82
GRADUATE CURRICULUM 83
Division of Pharmaceutical Sciences 83
Graduate Course Descriptions 89
APPROVED PROGRAMS 93
LIU TRUSTEES AND LEADERSHIP TEAM 94
LIU PHARMACY FACULTY 95
COUNCIL OF OVERSEERS 97

ABOUT LIU

Mission Statement

Long Island University's mission is to provide excellence and access in private higher education to those who seek to expand their knowledge and prepare themselves for meaningful, educated lives and for service to their communities and the world.

Vision

To become a nationally recognized, globally engaged, teaching and research university.

Motto

Long Island University's motto is *Urbi et Orbi* – "To the City and to the World."

Founding Date

Long Island University was founded in 1926.

Carnegie Classification

Doctoral Universities-High Research Activity (R2)

Alumni

LIU has an active network of more than 200,000 alumni, including leaders and innovators in industries across the globe.

Athletics

Colors: Blue and Gold
Nickname: Sharks Mascot: Shark
Teams: 39
National Affiliation: NCAA Division I
Conference: Northeast Conference (NEC)

LIU Brooklyn
1 University Plaza
Brooklyn, NY 11201
718-488-1000
www.liu.edu/brooklyn
LIU Post
720 Northern Boulevard
Brookville, NY 11548
516-299-2000
www.liu.edu/post
LIU Global
1 University Plaza
Brooklyn, NY 11201
718-488-1000
www.liu.edu/global
LIU College of Pharmacy
75 DeKalb Avenue
Brooklyn, NY 11201
718-488-1234
www.liu.edu/pharmacy
LIU College of Veterinary Medicine
720 Northern Boulevard
Brookville, NY 11548
516-299-2000
www.liu.edu/vetmed

LIU Hudson
735 Anderson Hill Road
Purchase, NY 10577
1800-GRAD-LIU
www.liu.edu/hudson

LIU Riverhead
121 Speonk-Riverhead Road
Riverhead, NY 11901
631-287-8010
www.liu.edu/riverhead

Accreditation

Long Island University is accredited by the Middle States Commission on Higher Education, 1007 North Orange Street, 4th Floor, Wilmington, DE 19801 (www.msche.org). The MSCHE is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA).

In addition to the institutional accreditation provided by Middle States, many of LIU's academic programs are accredited by specialized accreditation agencies. Additional information can be found at https://liu.edu/about/accreditations.

University Policies

Long Island University maintains a Policy Site to provide a comprehensive listing of all policies that are easily accessible to all members of the University community. The site contains the most up-to-date versions of all policies. For questions regarding a policy, contact policy@liu.edu.
Policy categories include:

- Academic Affairs
- Admissions
- Compliance
- Facilities
- Human Resources
- Information Technology
- Public Safety
- Student Affairs
- Student Finance
- Student Registration

To view all University Policies, visit www.liu.edu/policy.

Title IX

Long Island University does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs. The following person has been designated to handle inquiries regarding the non-discrimination policies:

Title IX Coordinator
Long Island University
700 Northern Boulevard
Brookville, New York 11548
Phone: (631) 287-8301

For assistance related to Title IX or other civil rights laws, please
contact OCR at OCR@ed.gov or 800-421-3481, TDD 800-877-8339.

University Grievance Policy

This policy complies with the Middle States Commission on Higher Education's *Verification of Compliance with Accreditation—Relevant Federal Regulations*, area 4, and the Commission's policy on published information. The University also adheres to federal regulations 34 CFR §602.16(a)(1)(ix) and 34 CFR §668.43(b).

In accordance with the United States Department of Education's Program Integrity Rules, the University provides all prospective and current students with the contact information for the state agency responsible for handling complaints against postsecondary institutions offering in-person [classroom] learning, distance learning, or correspondence education within that state.

Students are encouraged to first resolve academic and non-academic grievances through the appropriate internal channels at the University, as outlined in the Student Handbooks and/or current University Catalogs. For clarification regarding program requirements, graduation requirements, academic standing, or academic suspension, students should reach out to their Success Coach or academic advisor.

This grievance procedure applies only when procedures to address or challenge the action or conduct in question are not already provided by applicable University policies or those of any of its schools. Students are advised that most external complaint processes require them to exhaust internal avenues of complaint within the institution before pursuing an appeal.

Grievances are expected to be closed within 30 days of submitting a formal complaint; however, the University may require additional time due to continuing investigation requirements. The timeline may also require adjustment because of the academic calendar, university holidays, availability of the student and/or deans, faculty, and staff.

To report violations of law, breaches of policy, or allegations of improper conduct related to the University, or to provide other reliable information, students may file a report through the EthicsPoint Compliance Line/NAVEX Global at the toll-free number, 866-295-3143. The University expects that reports submitted through

EthicsPoint are made in good faith to address legitimate issues needing correction or to provide reliable information.

For an academic complaint:
Students who have a complaint regarding an academic matter should first attempt to resolve the issue directly with the appropriate faculty member. If the student is unable to resolve the issue with the faculty member, the student may seek an informal resolution or file a formal complaint.

Informal Resolution:
- Students who wish to address an issue but do not wish to file a formal complaint should begin by consulting their Success Coach, academic advisor, or designated student affairs professional in their college, for guidance on resolving the issue.
- Students will be counseled on how to informally address an issue with appropriate academic professionals, including the Program Director or Department Chair, Academic Dean, or other academic affairs professional. Students may be advised to file a formal complaint with the Program Director or Department Chair.
- Students may be referred to other appropriate resources, such as a Learning Center, Public Safety, Dean of Students, or counseling staff.
- Students who do not wish to consult their Success Coach or do not have one assigned, or if they are not satisfied with the guidance and wish to pursue the matter further, should contact the Dean of Students or Associate Dean of Students.
- Students may request confidentiality, but it cannot always be guaranteed, except by counseling staff, where confidentiality is assured unless otherwise stated in the Student Health and Counseling Confidentiality Policy.
- Students who are not satisfied with an informal resolution may seek to file a formal complaint with the Program Director or Department Chair.

Formal Complaint to the Program Director or Department Chair:
- Students who have attempted to resolve an issue with a faculty member and are not satisfied with the outcome may file a formal complaint with the Program Director or Department Chair.
- The complaint should state the policy allegedly violated, describe the facts and evidence supporting the violation, specify the desired outcome, and provide a brief history of the informal resolution attempts. The Program Director or Department Chair will meet with the complainant and any relevant individuals to gather facts and attempt to resolve the grievance. A written decision will be provided to both the complainant and respondent.
- Students who are not satisfied with the resolution provided by the Program Director or Department Chair may seek an appeal with their respective Academic Dean or designee by submitting the decision and complaint within 10 days for review. The Academic Dean or designee will follow the same investigative procedures noted above to review the appeal request.
- Students who are not satisfied with the outcome of the appeal rendered from the Academic Dean or designee, the student or respondent may appeal the decision to the Vice President for Academic Affairs or their designee by submitting the decision and complaint within 10 days for final review.
- The Vice President for Academic Affairs will only consider matters included in the written complaint and will ensure both parties have access to all relevant documents. Appeals will only be granted with evidence of procedural issues or challenges or to review new evidence that was not previously considered.
- The Vice President for Academic Affairs may, at their discretion, request an in-person hearing with the involved parties.
- The Vice President for Academic Affairs may dismiss the complaint without proceedings if they determine that no violation of University policy occurred, even if the facts alleged are true.

For a Non-Academic Complaint:
Students who have a complaint regarding a non-academic matter should first attempt to resolve the issue directly with the individual involved in the complaint, referred to as the respondent. If the student is unable to resolve the issue with the respondent, the student may seek an informal resolution or file a formal complaint.

Informal Resolution:
- Students who wish to address an issue but do not wish to file a formal complaint should begin by consulting their Success Coach, academic advisor, or designated student affairs professional in their college, for guidance on resolving the issue.
- Students will be counseled on how to informally address an issue with the respondent. Students may be advised to file a formal complaint with the Division of Student Affairs.
- Students may be referred to other appropriate resources, such as a Resident Director, Learning Center, Public Safety, Center for Student Success and Coaching, or counseling staff.
- Students who do not wish to consult their Success Coach or do not have one assigned, or if they are not satisfied with the guidance and wish to pursue the matter further, should contact the Dean of Students or Associate Dean of Students.
- Students may request confidentiality, but it cannot always be guaranteed, except by counseling staff, where confidentiality is assured unless otherwise stated in the Student Health and Counseling Confidentiality Policy.
- Students who are not satisfied with an informal resolution may seek to file a formal complaint with the Division of Student Affairs.

Formal Complaint to the Division of Student Affairs:
- Students who have attempted to resolve an issue with a respondent and are not satisfied with the outcome may file a formal complaint with the Division of Student Affairs.
- The complaint should state the policy allegedly violated, describe the facts and evidence supporting the violation, specify the desired outcome, and provide a brief history of the informal resolution attempts. The Associate Dean of Students or designee will meet with the complainant and any relevant individuals to gather facts and attempt to resolve the grievance. A written decision will be provided to both the complainant and respondent.
- Students who are not satisfied with the resolution provided by the Associate Dean of Students or designee may seek an appeal with their respective Dean of Students or designee by submitting the decision and complaint within 10 days for review. The Dean of Students or designee will follow the same investigative procedures noted above to review the appeal request.
- Students who are not satisfied with the outcome of the appeal rendered from the Dean of Students or designee, the student or respondent may appeal the decision to the Vice President for Student Affairs or their designee by submitting the decision and complaint within 10 days for final review.
- The Vice President for Student Affairs will only consider matters included in the written complaint and will ensure both parties have access to all relevant documents. Appeals will only be granted with evidence of procedural issues or challenges or to review new evidence that was not previously considered.
- The Vice President for Student Affairs may, at their discretion, request an in-person hearing with the involved parties.
- The Vice President for Student Affairs may dismiss the complaint without proceedings if they determine that no violation of University policy occurred, even if the facts alleged are true.

The Student Handbook and University Catalogs include explanations of Title IX and FERPA policies, as well as contact information for students who wish to file grievances in those areas. Students wishing to dispute a grade should follow the procedures outlined in the University's Grade Appeal Policy.

Current and prospective students who wish to file

complaints with the Middle States Commission on Higher Education or the New York State Department of Education can find the appropriate contact information on the Accreditations page of the University website.

For additional guidance on addressing complaints, see the Whistleblower Policy.

ABOUT LIU PHARMACY

Arnold & Marie Schwartz College of Pharmacy & Health Sciences

Over 140 Years of Tradition

The Arnold & Marie Schwartz College of Pharmacy and Health Sciences (LIU Pharmacy) was established in 1886 as the "Brooklyn College of Pharmacy" by the Kings County Pharmaceutical Society. The society's goals in establishing the college were "...to improve the science and art of pharmacy by diffusing knowledge among the apothecaries and druggists, fostering pharmaceutical literature, developing talent for pharmaceutical pursuit and investigation, and stimulating discovery and invention in the several departments of the drug business."

In 1929, the Brooklyn College of Pharmacy affiliated with Long Island University, one of the largest independent universities in the United States, and in 1976 Pharmacy physically moved onto the LIU Brooklyn campus. LIU Pharmacy attracts students who strive to grow personally, intellectually, and professionally in pharmacy and related fields.

The college serves as an urban leader in pharmacy education through its pursuit of excellence and innovation in teaching, scholarship, and service. Forging alliances and partnerships with healthcare providers and the pharmaceutical industry, the college has created a rich mosaic of programs that elevate student aspirations and are responsive to the healthcare needs of society.

As an advocate for an expanded scope of pharmacy practice, the college creates new paradigms for collaborative practice models that will shape the future of the profession of pharmacy. Three newly constructed state-of-the-art research facilities in the Wet Lab building enable meaningful collaboration with industry and further innovation in pharmacy education.

The college has completed more than 140 years of service to the state and the nation in the education of entry-level professional students and graduate students. Many LIU Pharmacy alumni have attained prominence in pharmacy and the other health professions.

Mission, Vision and Values

Mission and Vision

The mission of LIU Pharmacy is to educate, lead, and serve.

Our vision is to achieve preeminence in pharmacy education, research, and service through our commitments to:

- Embracing, educating, and empowering individuals who seek to become pharmacists and pharmaceutical scientists;
- Leading and advancing the profession of pharmacy and the pharmaceutical sciences through innovative practice, research, and education;
- Utilizing our academic disciplines to recognize and satisfy the needs of our community and the world.

Our vision is advanced through our dedication to:

- Creating a supportive and nurturing environment that allows each student to succeed and flourish professionally;
- Developing analytically strong and empathetic new pharmacists who practice evidence-based pharmacy and can contribute effectively to an interprofessional team working to treat individual patients and improve public health;
- Preparing graduate students for teaching, research, and other careers in academia, the pharmaceutical industry, and regulatory agencies;
- Providing academic, professional, and co-curricular opportunities to empower students as intellectually vigorous life-long learners;
- Developing professionals and scientists with inquisitive minds who seek to advance the relevant body of knowledge through research and other scholarly pursuits;
- Fostering the service of faculty, staff, and students towards innovation in practice; advancement in basic, clinical, and translational sciences; application of new educational strategies; and engagement of other health care professionals across the disciplines;
- Providing high-quality opportunities for continuing professional development to pharmacists, pharmaceutical scientists, pharmacy technicians as well as our faculty, staff, and preceptors.

As it has been since our founding in 1886, the achievement of our vision and mission is enhanced and informed by the remarkable diversity of our students, faculty, and other stakeholders and the rich mosaic of communities we serve.

Professional, Undergraduate and Graduate Degrees

LIU Pharmacy (The Arnold & Marie Schwartz College of Pharmacy and Health Sciences) offers the Bachelor of Professional Studies (BPS) in Pharmaceutical Studies as well as an entry-level, Doctor of Pharmacy (Pharm.D.) degree. Master of Science degrees are awarded in Pharmacy Administration, Pharmaceutics: Industrial Pharmacy or Cosmetic Science, Drug Regulatory Affairs, and Pharmacology/Toxicology. For the Doctor of Philosophy in Pharmaceutical Sciences (Ph.D.) degree, there are two tracks to choose from Pharmaceutics, and Pharmacology/Toxicology.

Membership

LIU Pharmacy is an institutional member of the American Association of Colleges of Pharmacy (www.aacp.org), the national organization representing pharmacy education in the United States. The mission of the association is to both represent and be an advocate for all segments of the academic community in the profession of pharmacy.

Accreditation

LIU's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60603-4810, 312/664-3575; FAX 312/664-4652; Website: www.acpe-accredit.org.

LIU Pharmacy Publications

In addition to LIU Brooklyn's and LIU's diversified publications, LIU Pharmacy offers:

- The Senior Yearbook, a graduation memento published by the Senior Class;
- The *Bulletin, for Professional and Graduate Pharmacy Programs*, listing admission requirements, curricula, course descriptions and other information;
- Student Handbook

Pharmacy Student Organizations

Students interested in developing their leadership skills are encouraged to apply to leadership and executive board role positions within professional pharmacy organizations and the PSLC. To qualify for these positions students must receive approval from the Assistant Dean of Student Academic and Professional Affairs (SAPA) and meet the following criteria:

- Students must be enrolled in both the Fall and Spring semesters of the academic year to hold an executive board member role.
- Students on academic probation, academic risk, or appeal approved dismissal students are not eligible to hold leadership roles.
- Students who are on academic risk or returned due to a dismissal appeal who achieve a 3.0 or higher in the previous semester can request permission from the Assistant Dean of Student Academic and Professional Affairs to hold a leadership position. If a student is granted permission, they will need to follow instructions given to them which would include

maintaining a 3.0 GPA per semester to continue to stay in role. The Assistant Dean of Student Academic and Professional Affairs has the authority to remove the student from role due to academic performance and/or disciplinary actions. This can be done at any time during the semester.
- Students sanctioned by the Disciplinary Committee or cited for professionalism issues by a dean are not eligible for an executive board member role.
- All students in leadership positions are expected to attend class.
- If at any time a student does not meet the requirements listed below, the Assistant Dean of Student Academic and Professional Affairs can withdraw them from their leadership role.

Pharmacy Student Leadership Council (PSLC) The PSLC is the student governing body of the College of Pharmacy that oversees the day-to-day activities of pharmacy students, professional organizations, and clubs. PSLC is recognized by the administration as the official representation of its pharmacy students. The PSLC is governed by a constitution and is led by the PSLC President and Vice President. Other positions that report to the President include the Executive and Corresponding Secretaries, Director of Communications, Treasurer, and the President and Vice President of each class. Other positions include Sponsorship Coordinator, Faculty Liaison and Events Secretary. In addition to organizing and promoting professional and social activities, the PSLC serves as an important link between students and faculty. The PSLC encourages and models professionalism in our pharmacy students on and off-campus. Students are expected to turn to the PSLC when there are questions of fair treatment with faculty and administration. Email PSLC at: liupslc@gmail.com

NATIONAL PROFESSIONAL PHARMACY ORGANIZATIONS WITH LOCAL CHAPTERS:

The American College of Clinical Pharmacy (ACCP) is a professional and scientific society that provides leadership, education, advocacy, and resources enabling clinical pharmacists to achieve excellence in practice and research. ACCP's membership is composed of practitioners, scientists, educators, administrators, students, residents, fellows, and others committed to excellence in clinical pharmacy and patient pharmacotherapy. ACCP StuNet is a network that provides student members access to leaders in clinical pharmacy, as well as a chance to explore leadership roles within ACCP. StuNet helps you build a professional network that will last long after you complete your degree. (www.accp.com/stunet)

The Academy of Managed Care Pharmacy (AMCP) is a professional association of individual pharmacists who use the tools and techniques of managed care in the practice of pharmacy. At the heart of every member is a commitment to a simple goal: Provision of the best available pharmaceutical care for patients. As an organization, AMCP's mission is to empower its members to serve society by using sound medication management principles and strategies to improve health care for all. The LIU student chapter of AMCP implements programs to provide pharmaceutical care to patients and to help reduce health care costs. Additionally, the chapter shows students a variety of different opportunities in the managed care setting for pharmacists to use their clinical and other educational skills. (www.amcp.org)

American Pharmacists Association-Academy of Student Pharmacists (APhA-ASP) is the national professional society of pharmacy students in the United States and an official subdivision of the American Pharmacists Association (APhA). ASP membership is open to any student regularly enrolled in a pre-pharmacy or pharmacy program in an accredited school. At present, ASP has over 24,500 members distributed in 142 colleges of pharmacy in the United States and Puerto Rico. ASP chapters provide many professional, educational, and social activities for members. (www.aphanet.org)

American Society of Consultant Pharmacists (ASCP) is the national professional association representing pharmacists who provide medication distribution and consultant services to patients in long-term care facilities. (www.ascp.com)

The American Society of Health-System Pharmacists- Student Society of Health-System Pharmacists (ASHP- SSHP) offers a broad array of services and products to health-system pharmacists and services as a national accrediting organization for pharmacy residency and technician training programs. Any student interested in institutional pharmacy practice should join; benefits include Studentline, a student newsletter, and special programs at ASHP national meetings. (www.ashp.org)

The Drug Information Association (DIA) has served for 60 years as a global forum for all involved in health care product development and life cycle management to exchange knowledge and collaborate in a neutral setting. Our goal is to help students find the information they need to help build and sustain their careers while expanding their network with key professionals from industry, government, academic, and patient organizations. (www.diaglobal.org)

The Industry Pharmacist Organization (IPhO) was founded by industry pharmacists for industry pharmacists. Its mission is to give pharmacy students more information to better understand the career opportunities open to them in the pharmaceutical industry. The chapter invites industry professionals, many of whom are alumni, to talk about their career paths and how to be successful in their areas of practice. IPhO members collect information on related internships as well as the skills, education and experience that will be helpful in starting a career in the pharmaceutical industry. In addition, the members work together to explore the different areas of pharmacy within an industry where pharmacy students and pharmacists have opportunities for work. (www.industrypharmacist.org)

The National Community Pharmacists Association (NCPA) was founded in 1898 as the National Association of Retail Druggists (NARD). It represents pharmacist owners, managers and employees of nearly 22,500 independent community pharmacies across the United States. Independent pharmacists- more than 60,000 nationwide –dispense the majority of the nation's retail prescription drugs. The student chapter offers students a wide array of opportunities to broaden and enrich their educational experience and gain valuable, real-world skills. (www.ncpanet.org)

New Jersey Pharmacy Association (NJPhA) was founded in 1870 to represent pharmacists in the State of New Jersey who practice in all areas of pharmacy. The student chapter was formed to promote networking opportunities for students who plan to practice in New Jersey. (www.njpharmacist.org)

The New York State Council of Health-System Pharmacists (NYSCHP) is the state's premier provider of information, training, and legislative representation for health-system professionals. The organization's approximately 2,000 members include pharmacists, pharmacy technicians, and pharmacy students. (www.nyschp.org)

Student National Pharmaceutical Association (SNPhA) is the student arm of the National Pharmaceutical Association which was established in 1947 to represent the views and ideas of minority pharmacists on critical issues affecting healthcare and pharmacy, promoting racial and health equity. SNPhA's mission is to plan, organize, coordinate, and execute programs geared toward the improvement of the health, educational, and social environment of minority communities and to offer student members the opportunity to develop leadership and professional skills (www.npha.net/snpha)

The Student Pharmacists Society of the State of New York (SPSSNY) is a student chapter of the state pharmacists organization whose focus is to promote the profession through legislative initiatives, networking opportunities and continuing education programs. The focus of this chapter is to keep students informed and mobilized

regarding pending legislation that will affect the practice of their profession in New York. All students in the professional program receive membership in SPSSNY (www.pssny.org).

ETHNIC AND RELIGIONS ORGANIZATIONS:

African Pharmacy Student Association (APhSA) was created to foster the unity and progress of African and other students with varied continental backgrounds in the College of Pharmacy. Its main goal is to connect student pharmacists with the community and to enhance their outreach by creating more networking opportunities with alumni practicing in a variety of career paths. (LIU APhSA liuaphsa@gmail.com)

Albanian-American Pharmacists Association (AAPhA) is one of the newest student organizations formed by students of the Albanian diaspora in order to foster a sense of community and pride in their culture and their profession. AAPhA's mission is to promote health literacy and education in their community and an interest in pharmacy among young Albanian American students.

Bangladeshi American Pharmacists Association (BAPA) is the student chapter of the parent BAPA organization and an ethnic affiliate of PSSNY. The purpose of the organization is to foster cooperation and collaboration among Bangladeshi pharmacy students to network with the Bangladeshi pharmacy community and to support the profession of pharmacy in Bangladesh and in North America. (www.facebook.com/bapainfo)

Community of Asain-American Pharmacy Students for Unity, Leadership, and Equality (CAPSULE) cultural is an organization open to all LIU Pharmacy students to encourage leadership skills, raise cultural and political awareness of the AAPI experience, conduct health outrouch events to underserved AAPI communities and provide career awareness to high school students and combat stigmas and negative stereotupes attributes to people of Asian, Asian American or Pacific Islander (AAPI) descent.

Indo-American Pharmacists Society (IAPS) was formed by pharmacy students of Indian origin to promote social and professional networking opportunities and is open to all pharmacy students. IAPS is an ethnic affiliate of PSSNY. (www.iapsrx.org)

Jewish Pharmaceutical Society (JPS) was originally formed in the 1950s at the Brooklyn College of Pharmacy and has been revived by students interested in promoting the profession among Jewish pharmacy students. Their events and guest speakers focus their attention on the intersection of their culture and their profession. (jewishpharmaceuticalsociety@gmail.com)

Middle Eastern Pharmacy Association (MePA) is affiliated with the American Pharmacists Association (APhA). MePA's mission is to have student pharmacists communicate and collaborate with Middle Eastern communities in order to raise health awareness and improve patient care.

National Hispanic Pharmacy Association (NHPA) was formed to increase access to care for Hispanic communities. NHPA's goal is to empower Hispanic pharmacists and other members of the health care community. The organization plans to lead efforts that will improve the health of Hispanic populations, which are currently underrepresented among health professionals.

Pakistani American Pharmacists Association (PAPA) is a student professional organization involved in promoting the practice of pharmacy, education, and research for pharmacists of Pakistani origin and is open to all pharmacy students. It is an ethnic affiliate of PSSNY. (papausa.com)

Pharmacy Coptic Orthodox Christian Club (PCOCC) is the campus organization for Egyptian Coptic Christian pharmacy students promoting the practice of pharmacy as well as the culture and faith of their community. Open to all LIU professional and pre-professional pharmacy students.http://www.facebook.com/pages/Coptic-Orthodox-Christian-Club-LIU

The Ukrainian-American Pharmacist Association (UAPA) was formed to help provide health care information for areas with a significant Ukrainian population and to provide more networking opportunities for pharmacy students by collaborating with various organizations and Ukrainian pharmacists and healthcare professionals in NYS. This organization is open to all pharmacy students.

OTHER PROFESSIONAL HEALTH-RELATED ORGANIZATIONS:

ACE - The Health Practitioner's Society, is a social and professional society for members from all health professions, where creating a close-knit network for health professionals is the main focus. ACE collaborates with other health professional students to organize health fairs and host interprofessional experiences. (https://www.facebook.com/acehps)

The Cosmetic Science Club is a new organization for PharmD and gradute students interested in introducing students to careers within the pharmaceutical cosmetic industry including marketing, formulation, and research. It will help students to learn the latest advances in their field and helps students to develop advanced skills that can lead to future employment opportunities in the cosmetics industry.

The Initiation of Giving Internationally through Volunteer Experiences(iGIVE) was formed by pharmacy students but is open to all students of Long Island University. Our goal is to provide opportunities for students interested in service abroad, particularly in underdeveloped countries, such as Haiti, Honduras, and Costa Rica, Bangladesh, and Guyana among others. Students may use the service experience abroad to fulfill requirements toward their Doctor of Pharmacy degree. The organization is dedicated to building sustainable projects in the communities they visit. Membership promotes education on campus of these health initiatives through Professional Development Programs (PDPs), fundraising, and other programs. (bkln-igive@my.liu.edu)

Project Sunshine is a renowned international non-profit organization that operates in 5 countries and impacts over 150,000 patients each year. Over 3 million children are hospitalized each year in the United States. Through creative, recreational, and educational activities delivered in medical settings by trained volunteers, Project Sunshine works to ensure that all children have access to their childhoods regardless of their health conditions. (www.facebook.com/ProjectSunshineLIU)

Weill Cornell Community Clinic (WCCC) Program. This is a student-initiated program that collaborates with medical students from Weill Cornell Medical College to counsel clinic patients in an underserved Manhattan community under the supervision of a physician and clinical pharmacist. For P4, P5, and P6 students.

Sangam is the newly reactivated Indian cultural club on campus composed mostly of pharmacy graduate students. Their main events of the year is a Navratri Celebration, the Indian Dance Festival held in the fall and Holi, the Festival of Colors in spring. http://www.facebook.com/Sangam.liu

PROFESSIONAL FRATERNAL SOCIETIES:

Lambda Kappa Sigma (LKS) – Alpha Eta Chapter is the only international, professional fraternity for women enrolled in pharmacy. It seeks motivated female students to join its ranks and encourages the development of its members both culturally and intellectually. LKS provides both professional and social functions throughout the academic year. (www.lks.org)

Phi Delta Chi Pharmacy Fraternity (PDC) develops leaders to advance the profession of pharmacy. Phi Delta Chi, a lifelong experience, promotes scholastic, professional, and social growth in its Brothers. As a co-ed fraternity, we strive to provide quality services to our patients, thereby advancing public health and strengthening ourselves as health professionals. (www.phideltachi.org)

PHARMACY HONOR SOCIETIES:

Phi Lambda Sigma—Beta Kappa Chapter—is the

national pharmacy leadership society that promotes the development of leadership qualities among pharmacy students. To be eligible for membership, the student must be of high moral and ethical character, must have completed 96 credits of scholastic work applicable for the pharmacy degree, and have a grade point average of at least 2.50. Prospective members are nominated on the basis of their demonstration of dedication, service, and leadership in the advancement of pharmacy. Members are selected by peer recognition. (www.philambdasigma.org)

The Rho Chi Society – is the national pharmacy honor society, which stimulates and recognizes superior scholarly achievement in pharmacy. Entry-level students in the upper 20% of their class who have a cumulative index of 3.5 or better are eligible for membership in the Beta Theta Chapter during their fourth, fifth, or sixth year. Graduate students are eligible for membership if they have completed at least 50% of their didactic coursework with a minimum cumulative index; Ph.D. students must possess a cumulative index of 3.5 or better and masters students must possess a cumulative index of 3.75 or better. To be eligible for membership, students must have no known disciplinary action for academic dishonesty, misconduct, or unprofessional behavior. Eligible students will be automatically nominated for Society membership. Student members of the Chapter are available to tutor pharmacy students upon request throughout the academic year. (www.rhochi.org)

PUBLICATIONS & SOCIAL MEDIA

The Pharmacy Newsletter (TPN) and Doses & Notices is a print and online publication by students in the PharmD program that aspires to promote communication among students, faculty, administrators, and the wider campus of LIU Brooklyn. In addition to covering events, activities, and interviews for and about the College of Pharmacy, each issue has a particular focus within the profession and may include original research of a peer-review nature as well as articles on scientific subjects.
Web:http//www.facebook.com/groups/The Pharmacy Newsletter LIU.

Pharmakon is the yearbook of the Arnold & Marie Schwartz College of Pharmacy and Health Sciences at Long Island University. It is developed annually by graduating students. Since the earliest years after it was founded in 1886, the Brooklyn College of Pharmacy's graduating class published an annual yearbook called The Crimson and Gold. In 1924, it was renamed Pharmakon, an ambiguously interesting Greek word meaning that "which acts as both remedy and poison;" it also refers to the gift of writing. The editors of Pharmakon accept the ambiguity of our publication's title seriously since it accurately reflects our experience at this institution: that which hasn't killed us has made us stronger. The title's secondary meaning, the gift of writing, we take as a challenge, to improve upon that which has been passed down to us.

CAMPUS CLUTRUAL CLUBS (PREDOMINATELY PHARMACY)

LIU Hellenic Student Association (HSA) is a newly formed organization for students of Greek heritage to celebrate their heritage and history. All students are welcome. Most members are pharmacy students.

LIU Muslim Student Association (MSA) is a newly revitalized student organization for Muslim students. All students are welcome. Many of its members are in the pharmacy program.

LIU PHARMACY FACILITIES

Computer Laboratory

Computers on the third floor of the library are available for student use. Computer labs for courses and testing are in the Metcalfe building and the Library Learning Center building.

LIU Pharmacy (Main Building)

The three-story main building of LIU Pharmacy houses the offices of the deans and administrative staff. Adjacent to these offices is the dean's conference room. In addition, the first floor of the building houses the Office of Student Academic and Professional Affairs and the office of Assistant Dean for Admisions. Faculty office suites for the Divisions of Pharmaceutical Sciences and Pharmacy Practice are located in the basement of this building. The suites consist of offices for divisional faculty members and support staff. The second floor of the building contains a student lounge, a faculty lounge, an office for student professional organizations, a lecture room, and the Offices of Continuing Professional Education and Interprofessional Education. The third floor of the main building houses the Office of Assessment, additional faculty office suites for the Division of Pharmacy Practice, and a quiet study room for pharmacy students.

Pharmacy Wet Lab Building

The three-story Wet Lab Building contains a mix of faculty offices, research facilities, and teaching laboratories. The first floor of the building houses a Physical Assessment Laboratory that utilizes computer technology and other equipment to provide students with "hands-on" training and practice in physical assessment as well as a student study space that facilitates group work. The second floor houses research laboratories for the Division of Pharmaceutical Sciences, the Pharmacy Dispensing Laboratory, and the Pharmacy Practice Laboratory. The third floor of the building houses three newly constructed state-of-the-art research facilities: the Natoli Institute for Industrial Pharmacy Research and Development; Joan and Samuel J. Williamson Institute for Pharmacometrics; and the Leon Lachman Institute for Pharmaceutical Analysis. The third floor also houses the college's Animal Care Facility and the Arthur G. Zupko Systems Pharmacology and Pharmacogenomics Laboratory.

Center for Innovative Medication Management: Located in the Wet Lab Building

The Center for Innovative Medication Management (CIMM) is a state-of-the-art laboratory developed in partnership with Omnicell, a leading provider of medication management and adherence tools for health systems and pharmacies, to provide an immersive pharmacy technology and analytics experience for LIU Pharmacy students.

William Zeckendorf Health Sciences Center

This six-story facility houses offices, classrooms, laboratories, and student study spaces for LIU Pharmacy as well as the Harriet Rothkopf Heilbrunn School of Nursing and School of Health Professions. The Division of Pharmaceutical Sciences occupies the sixth floor of the building. In addition to division and faculty offices, the sixth floor contains numerous research laboratories, a seminar room, and a conference room.

LIU PHARMACY OFFICES AND SERVICES

Dean
Kim Tanzer (Interim)
718-488-1004
Vice Dean
Kim Tanzer
718-488-1247
Assistant Dean of Student Academic and Professional Affairs
Dr. Lisa Topolski, Assistant Dean
718-488-1234
Assistant Dean for Admissions and Director of Experiential Education
Dr. Brian Yeung, Assistant Dean
718-488-1234
Graduate Programs
Dr. Ahmed Abu Fayyad, Chair
718-488-1653
Assessment
Dr. Mark Scott, Associate Dean of Assessment and Accreditation
Dr. Douglas Jennings, Director of Assessment and Accreditation
Bryanna Milligan, Assistant Director of Assessment
718-488-1240
Interprofessional Education
Dr. Janna Roitman, Director
718-780-6121
Pharmacy Leadership Institute
Dr. Scott Mark. Director
718-488-1240
Continuing Education
Lisa Topolski (interim)
718-488-1065

Student and Professional Affairs

718-488-1234

The Office of Student Academic and Professional Affairs serves as an advisement and resource center for students enrolled in the professional programs of LIU Pharmacy. The office provides students with academic and personal advisement, registration materials, and information on scholastic standing, scholarship applications, listings of intern positions and other employment opportunities, information on student activities and professional organizations, and other services and information of interest to professional pharmacy students.

Academic and personal advisement is provided by a professional staff knowledgeable of the pharmacy curricula and empathetic to the needs and concerns of professional students. Additionally, the staff assists students with course selection and registration, facilitates student success workshops, inform students of scholarship opportunities, and assists in matters of progression and scholastic review of students.
The Office of Student Professional Activities is included within the Office of Student Academic and Professional Affairs.

Student and Professional Activities

The Office of Student Professional Activities is responsible for coordinating the activities of pharmacy student organizations in association with the Office of the Assistant Dean of Student Academic and Professional Affairs. The office arranges and coordinates informational activities for pharmacy students including Professional Development Programs (PDPs), alumni mentor events, pharmacy residency, fellowship and graduate program showcases, resume and interview workshops, and career fairs as well as coordinating on-campus recruitment of pharmacy students. In addition, the office oversees the LIU Pharmacy Student Leadership Council and yearbook staff.

Division of Pharmaceutical Sciences

718-488-1101

The Division of Pharmaceutical Sciences provides students with requisite instruction and skill development in biological, chemical, physical, mathematical, administrative, social, and behavioral sciences, as well as selected areas from the humanities such as law, ethics, and communications, and the application of these areas to both the pharmaceutical sciences and the practice of pharmacy. The knowledge imparted to the professional program student covers a broad range of topics such as biochemistry, physiology, pathophysiology, microbiology, immunology, pharmacology, toxicology, medicinal chemistry, pharmaceutics, pharmacokinetics, health delivery and finance, practice management, pharmacoeconomics, pharmacy law, patient behavior, and professional communications. Additionally, the division is responsible for the delivery of the college's graduate programs.

Division of Pharmacy Practice

718-488-1270

The Division of Pharmacy Practice provides students with the requisite instruction and skill development for engaging in the profession of pharmacy in ways that optimize health outcomes from pharmaceutical and other related treatments and interventions, ensure the effective and safe use of pharmaceuticals and maximize the benefits to both patients and society at large from the use of medications. This is accomplished through both didactic course offerings in areas such as pharmacotherapeutics, physical assessment, drug information and literature evaluation, clinical pharmacokinetics, as well as introductory and advanced pharmacy practice experiences (with the Office of Experiential Education) offered throughout the professional phase of the Doctor of Pharmacy program.

Office of Experiential Education

LIU Pharmacy's Office of Experiential Education is responsible for the overall programmatic planning, management, and oversight of the experiential education program. The Office ensures that experiential programming meets ACPE Standards and Guidelines as well as the goals and objectives noted in the College's Mission and Vision. Accounting for approximately 30% of the professional pharmacy curriculum, the goal of the experiential education program at LIU Pharmacy is to augment students' classroom learning experience with direct interaction with health care providers and patients. Experiential education provides an opportunity for students to participate in a variety of patient-centered activities with other members of the healthcare team in various patient care settings and to take responsibility for providing direct patient care. Emphasis is placed on developing each student's ability to identify and resolve medication-related problems while displaying professionalism, confidence, and decisiveness. Additionally, through the various required and elective opportunities, students can participate in non-patient care activities related to pharmacy and apply skills necessary for successful practice in the diverse field of pharmacy.

Office of Assessment

The Office of Assessment supports the College's assessment program as it relates to its academic, programmatic, and accreditation goals. Specific functions include

- Implementing and updating the programmatic evaluation plan for the College.
- Leading the continuous quality improvement process by collaborating with College and University faculty and staff to collect, analyze, and disseminate data from various sources to inform program effectiveness and areas of improvement
- Leading the development, implementation, and monitoring of performance improvement plans
- Supporting College committees, faculty members, and administrators to identify, design, refine, and administer measurement tools
- Providing feedback to faculty and administrators on survey design and administration
- Overseeing the development and delivery of training programs/materials on assessment
- Leading strategic planning initiatives

- Ensuring University compliance with accreditation by supporting faculty in the preparation of annual student learning outcomes assessment reports and academic program review for graduate programs
- Overseeing the pre-APPE competency assessments and the AACP Curriculum Quality Surveys
- Serving as the College of Pharmacy liaison for all assessment and accreditation matters and ensure that that monitoring and self-study reports are prepared and submitted to the Accreditation Council for Pharmacy Education.
- Supporting faculty in the development, implementation, and analysis of curricular and student learning outcome assessment plans.
- Managing and disseminating data to key stakeholders related to student achievement of core competencies and learning outcomes, national surveys, and standardized examinations.
- Overseeing the administration of student evaluations of course and instructor effectiveness.
- Managing the College's computer-based assessment systems.
- Administering various assessment activities including objective structured clinical examinations and focus groups.

Office of Interprofesssional Education

The World Health Organization (WHO) defines interprofessional education (IPE) as an education that "occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes." This collaborative approach is essential in modern healthcare, fostering teamwork and enhancing patient-centered care.

In 2009, the Interprofessional Education Collaborative (IPEC) established four Core Competencies for Interprofessional Collaborative Practice, which serve as a framework to guide curricula development across health professions. These competency domains include:

- Values/Ethics for Interprofessional Practice
- Roles/Responsibilities
- Interprofessional Communication
- Teams and Teamwork

The LIU College of Pharmacy has instituted several initiatives to ensure that all pharmacy students engage in comprehensive IPE experiences and are equipped with the knowledge and skills necessary to collaborate with multiple healthcare professionals effectively. By fostering teamwork among healthcare providers, IPE helps enhance patient safety, improve treatment outcomes, and strengthen the overall healthcare system.

To support these initiatives, the LIU College of Pharmacy has established strong collaborations with neighboring and affiliated healthcare facilities and programs. These partnerships include LIU School of Health Professions and LIU Heilbrunn School of Nursing, providing students with exceptional, campus-wide IPE experiences. Additionally, the College has successfully developed working relationships with NYU Medical School, NYU Dental School, and NYU Nursing School, enabling cooperative IPE activities that broaden students' exposure to interprofessional collaboration in various healthcare settings.

Other professional health related organizations: In collaboration with the Mt. Sinai East Harlem Health Outreach Partnership (EHHOP) Free Clinic, LIU Pharmacy students provide care to uninsured patients. LIU Pharmacy students working alongside Mt. Sinai PGY-2 pharmacy residents, nursing, medical, social work, and other health care professionals provide care and manage chronic diseases (for P4, P5, P6 students).

The LIU College of Pharmacy, with its 125-year legacy, remains a prominent leader in healthcare education in New York City. As one of the oldest and most prestigious pharmacy schools on the East Coast, the College is dedicated to preparing students for the evolving demands of healthcare practice through robust IPE programs.

IPE is an integral component of the PharmD curriculum at LIU Pharmacy. From the moment students enter the program, they are informed that active participation in IPE activities is mandatory for graduation. The College ensures that each professional year of study includes meaningful IPE experiences to reinforce the importance of collaborative practice.

Some of the recent IPE programs in which LIU students have participated include:

- Teaching Oral-Systemic Health (TOSH) in partnership with NYU affiliates, focusing on the relationship between oral health and systemic conditions.
- Identifying and Managing Opioid Addiction and Substance Abuse in collaboration with NYU nursing students, addressing one of the most pressing public health crises.

The goals of the IPE Office at LIU College of Pharmacy include:

1. Expanding and strengthening collaborations with existing partners while seeking new affiliates to increase the number and scope of IPE activities.
2. Integrating IPE principles into the college's experiential curriculum (IPPEs and APPEs) to ensure daily application of interprofessional collaboration in real-world healthcare settings.

By embedding IPE into the learning model, the College not only increases the breadth and depth of opportunities available to students but also lays the foundation for pharmacy students to take a leadership role in medication-related decisions. This prepares them to work effectively alongside other healthcare professionals, ultimately improving patient care and advancing the pharmacy field.

Continuing Professional Education

LIU Pharmacy's Department of Continuing Professional Education serves pharmacists in advancing their continuing professional development (CPD) by providing live and web-based continuing professional education (CPE) activities.

The department affirms the mission of LIU Pharmacy and articulates its own primary mission of providing sufficient, affordable, convenient, and high-quality knowledge-based CPE activities to maintain, advance, and enhance the competencies and ongoing professional development of pharmacists.

An average of 20 continuing professional education activities is provided each year. Target audiences vary by activity but in most cases, activities are structured for pharmacists practicing in community-, ambulatory- and/or institutional-based settings that deliver patient-centered care. Many of the activities focus on pharmacotherapy for various disease states and/or special populations such as geriatric or pediatric patients. These activities are designed to advance and enhance the evidence-based practice of participants. Also regularly offered are activities that focus on general practice areas such as pharmacy laws and regulations, patient education and communications, and practice management.

Since 2008, the department has trained over 4000 pharmacists and students to be certified immunizers and has recently added the APhA Medication Therapy Management (MTM) certificate program to its offerings as well as Cardio Pulmonary Resuscitation (CPR) and Basic Life Support.

The department strives to provide a minimum of 3 contact hours of activities on medication errors and patient safety each year for those pharmacists needing to satisfy New York State requirements for continuing professional education.

In-person live CPE activities are available at convenient locations in the New York City metropolitan area including our LIU Brooklyn Campus. Participation in these live offerings affords valuable networking occasions in addition to advancing CPD. On-demand web-based CPE activities are also available. Featuring a wide range of topics these activities are designed for completion at the learner's own convenience and pacing. Visit the Continuing Professional Education website at http://pharmce.liu.edu or call 718-488-1065 for the latest information.

Alumni Association

The purpose of the Alumni Association is to foster meaningful social and professional relationships among all members of the college family, to further the profession of pharmacy, and to develop and advance the interests of LIU Pharmacy. The Alumni Association encourages all alumni of LIU Pharmacy to support the Annual Fund, which provides assistance to LIU students in need through vital financial aid programs.

DIRECTORY

LIU PHARMACY GENERAL INFORMATION:
718-488-1234
LIU PHARMACY ADMINISTRATION:
DEAN—Vice Dean for Academic Affairs
Interim Kim Tanzer, Pharm.D.
Rm. L108; 718-488-1004
VICE DEAN FOR ACADEMIC AFFAIRS
Rashid Mosavin PhD MBA
Rm. L130A; 718-488-1234
ASSISTANT DEAN OF STUDENT ACADEMIC AND PROFESSIONAL AFFAIRS
Lisa Topolski , PharmD
Rm. L130E; 718-488-1234
ASSISTANT DEAN OF ADMISSIONS and DIRECTOR OF EXPERIENTIAL EDUCATION —
Brian Yeung, Pharm.D.
Rm. L124; 718-488-1234
CHAIR, DIVISION OF PHARMACY PRACTICE—
Joseph P Nathan, PharmD, MS
Rm. HS612; 718-488-1251
CHAIR, DIVISION OF PHARMACEUTICAL SCIENCES—
Ahmed Abu Fayyad, PhD, B.S.
Rm. WL111; 718-488-1626
ASSISTANT DIRECTOR OF ASSESSMENT—
Bryanna Milligan
Rm. L306A, 718-780-4048
DIRECTOR, INTERPROFESSIONAL EDUCATION—
Janna Roitman, M.S., Pharm.D. MPA
Rm. L207, 718-780-6121
DIRECTOR, CO-CURRICULAR AFFAIRS AND PATIENT SIMULATION—
Brooke Fidler, Pharm.D., CHSE
Rm. B03-F, 718-780-4195
DIRECTOR, POST-GRADUATE EDUCATION—
Vacant
PHARMACY PROJECT COORDINATOR—
Sara O'Shea, B.A.
Rm. L108; 718-488-1228
DIRECTOR, PROGRAM SUPPORT SERVICES—
Aruna Kissoon, B.A., M.S.
Rm. HS614A; 718-780-4560
DIRECTOR, CONTINUING PROFESSIONAL EDUCATION—
Lisa Topolski, Pharm.D. (Interim)
Rm. L207; 718-488-1065
COORDINATOR FOR CONTINUING EDUCATION AND INTERPROFESSIONAL EDUCATION
Milena Ioselevich, BS, MPA
Rm. 207 718-488-1065
COORDINATOR, PHARMACY STUDENT COUNSELING
Jacqueline McEwan, B.A., M.S.
Rm. L130B; 718-780-6112
PHARMACY ACADEMIC ADVISOR—
Matthew Knapp, M.S.
Rm. L130C; 718-488-1693
ASSOCIATE DIRECTOR PRE-PHARMACY
Shane Lashley, M.S.
Rm. Student Union Building S310; 718-488-1659

ASSISTANT DIRECTOR FOR SITE AND PRECEPTOR DEVELOPMENT—
Elena Khachaturyan, Pharm.D.
Rm. HS114B 207; 718-488-1244
ASSISTANT DIRECTOR FOR SITE AND PRECEPTOR DEVELOPMENT
Chris Taduran, Pharm.D., BCPS
Rm. HS114A; 718-488-3469
SENIOR ASSOCIATE DIRECTOR OF PHARMACY ADMISSIONS-LIU BROOKLYN
Vacant
Rm. L130D; 718-488-3411
and RM. Sloan 101
SECRETARY- OFFICE OF STUDENT ACADEMIC AND PROFESSIONAL AFFAIRS
Patricia Bello: Rm. L130 718-48--1234
SECRETARY- OFFICE OF THE DEAN:
Gloria Khan: Rm. L108 718-488-1004

LIU BROOKLYN GENERAL INFORMATION:
718-488-1000
ADMISSIONS
Sloan 101; 718-488-1011
LIBRARY
718-488-1680
PUBLIC SAFETY
Rear, Metcalfe Building; 718-488-1078
Center for Student Success and Coaching (Bursar, Financial Aid, Registrar)
Sloan Building, S310; 718-488-1037
Campus Life
Sloan Building, S301
Residence Life
Sloan Building, S301
Psychological Service Center
Pratt Building, Rm 510
Tutoring Support
Library Learning Center, LLC 4th Floor
Campus Ministry
Sloan Building, Rm221
Information Technology Services (IT)
Metcalfe Building, Rm M318

ACADEMIC CALENDAR 2026-2027

Fall 2026

September 2	Classes Begin
September 7	Labor Day-holiday: no classes
September 2-15	Registration and program changes (permission to enter Lab courses required after September 8)
September 12-13	Weekend Session A: classes begin
September 15	Registration and drop/add ends for full-term classes
October 12	Last day to apply for a fall comprehensive examination
October 12	Spring/Summer 2026 Registration Begins for Continuing Students (tentative)
October 24-25	Weekend Session A: final class meetings/examinations
October 31	Weekend Session B: classes begin
November 6	Last day for full or partial withdrawal for full-term Fall courses
November 6	Last day to opt Pass/Fail for undergraduate courses
November 25-29	Thanksgiving holiday
December 14	Semester classes meeting Monday through Friday end
December 15-21	Final Exam Week
December 19-20	Weekend Session B: final meetings/examinations
December 22	Winter recess begins

All classes must meet during the Final Examination period (for either a final exam or regular class meeting) in order to meet minimum contact hours required by NYSED.

Winter 2027

January 4	Intersession Classes Begin
January 15	Final Class Meeting/Final Exam

Spring 2027

January 8	Fall Degrees Conferred
January 19	Weekday Classes begin
January 19-February 1	Registration and drop/add period for full-term courses (permission required for Lab courses after January 25)
January 23-24	Weekend Session C: classes begin
February 1	Registration and drop/add ends for full-term courses
February 15	President's Day-no classes
February 16	Monday Classes meet - no Tuesday Classes
February 22	Fall 2027 Registration opens for continuing students (tentative)
March 7-8	Weekend Session C: final class meeting/examinations
March 13-14	Weekend Session D: Classes begin
March 15	Spring Recess Beings
March 22	Classes resume
April 2	Last day for withdrawal from full-semester classes
April 2	Last day to opt Pass/Fail for undergraduate courses
April 14	Last day to apply for a spring degree
May 1-2	Weekend Session D: Final examinations/Last Class Meeting
May 4	Semester classes meeting Monday through Friday end
May 5 - 11	Final examinations-undergraduate and graduate
TBD	Commencement Ceremony
May 14	Conferral of May degrees

Summer 2027

May 17	First day of classes for **First Five Week, First Six Week** and **Full Summer Sessions**
May 19	Last day to add/drop classes for **First Five Week** and **First Six Week Sessions**
May 23	Last day to add/drop classses for 10 and 12 week sessions
May 29-31	Memorial Day-holiday - no classes
June 4	Make up day from May 31st classes
June 4	Last day for withdrawal from **First Five Week Session**
June 11	Last day for withdrawal from **First Six Week Session**
June 18	Last day of **First Five Week session**
June 21	First day of classes for **Second Five Week** Session
June 23	Last day to add/drop for **Second Five Week Session**
June 25	Last Day of **First Six Week Session**
July 2	Last day for withdrawal from **Ten Week Session**
July 3-5	Independence Day Weekend - no classes
July 6	First day of classes for **Second Six Week** Session
July 8	Last day to add/drop for **Second Six Week Session**
July 9	Make up day from July 5
July 9	Last day for withdrawal from **Second Five Week Session and 12 Week Session**
July 23	Last day of **Second Five Week Session and 10 Week Session**
July 26	First day of classes for **Third Five Week Session**
July 28	Last day to drop/add classes for **Third Five Week Session**
July 30	Last day for withdrawal from **Second Six week session**
August 6	Last day of **12 Week Session**
August 13	Last day of **2nd Six Week Sessions**
August 13	Last day for withdrawal from **Third Five Week Session**
August 27	Last day of **Third Five Week Session**

August 31	Summer Degrees conferred

HONORS COLLEGE

MISSION

The Long Island University Honors College is dedicated to developing a select group of diverse and highly gifted undergraduate students for meaningful contributions during their LIU journey and beyond. Honors College students complete a curriculum built on interdisciplinary connections, research opportunities, civic engagement, and experiential learning activities. Beyond the classroom, programming and events help shape global citizens prepared to emerge as leaders in their respective fields. Upon completing their undergraduate career at LIU, all Honors College students should depart with a well-defined path forward, whether pursuing graduate studies, embarking on a chosen career trajectory, or achieving notable fellowships, grants, and awards.

The mission of the Honors College at Long Island University aligns closely with the university's broader mission by emphasizing the development of highly gifted, diverse undergraduate students who are prepared to contribute meaningfully to society and the world. As LIU's mission is focused on providing excellence and access in higher education, the Honors College plays a crucial role in expanding opportunities for students to engage in interdisciplinary learning, research, and global citizenship—all key aspects of the LIU mission.

The Honors College contributes directly to LIU's strategic goal of advancing academic excellence through innovation. By offering a rigorous curriculum that blends research opportunities, civic engagement, and experiential learning, the Honors College fosters an innovative academic environment where students are encouraged to think critically, develop original ideas, and pursue advanced research across various disciplines. This emphasis on innovation prepares students to contribute to solving contemporary global challenges, thus aligning with LIU's vision of advancing solutions for a sustainable global future.

Additionally, the Honors College's commitment to fostering global citizenship and leadership within its student body supports LIU's strategic objective to advance student engagement through distinctive experiences. Through global study programs, fellowships, internships, and leadership opportunities, Honors College students are prepared to navigate and contribute meaningfully to diverse and global communities, aligning with the university's vision of producing graduates ready for service to their local and global communities.

Finally, as the Honors College prepares students for graduate studies, careers, and prestigious awards, it directly supports LIU's strategic priorities of advancing academic excellence and ensuring the development of well-rounded, career-ready graduates. By providing an enriching and holistic educational experience, the Honors College helps fulfill LIU's mission of preparing students for meaningful, educated lives and leadership roles in society.

ADMISSION REQUIREMENTS

The Long Island University Honors College typically accepts around 75 students per cohort on each campus. We do not have a strict cutoff for high school GPA or standardized tests, as each student is evaluated individually based on their unique experiences and potential. We aim to identify students who are driven, intellectually curious, and eager to excel academically within the Honors College community.

Fall 2025 Enrolled First-Year Honors College Students:

Median Unweighted GPA – 100

SAT Middle 50th Percent – 1380

ACT Middle 50th Percent – 31

HONORS COLLEGE REQUIREMENTS

Long Island University Honors College students receive Honors College Recognition by earning 24 Honors College credits during their tenure. The 24 Honors College credits can be earned through Honors College courses, study abroad, graduate courses, independent studies, Honors internships, and AP/IB test transfer credits with scores of 5 or 6+, respectively.

Honors College Recognition (24 credits) Options:

-Honors College Courses: These courses, taught by esteemed faculty, challenge high-achieving and gifted students. They encompass research and creative scholarship, interdisciplinary learning, service learning and leadership, and experiential learning. Students take these courses to satisfy certain core curriculum and elective requirements.

-Study Abroad: Participating in a study abroad program offers students a unique opportunity to broaden their worldview, expand their network, and refine their professional aspirations over the course of a term or intersession.

-Graduate-Level Courses: Successfully completing graduate-level courses in a chosen field demonstrates a commitment to academic rigor and intellectual advancement.

-Independent Study Courses: These courses involve faculty-guided, independent research, writing projects, creative endeavors, and entrepreneurial ventures. Students work closely with a faculty mentor, dedicating a full semester to their project and collaborating to define a plan of study and expected outcomes.

-Internships: Academic credit is awarded for off-campus internships undertaken by students across all majors. Through this experience, students gain practical skills and insights, culminating in reports detailing their internship experiences.

-AP/IB Credits (Score of 5 or 6+): Transfer credits from AP or IB exams, scored at 5 or 6+, respectively, contribute towards fulfilling the requirements for Honors College Recognition, acknowledging students' prior academic achievements and proficiency.

No specific Honors College courses are mandatory, and there is no strict timeline for when students take their Honors College courses. However, students should work to ensure the Honors College requirements are met at an appropriate pace throughout their academic careers. Taking one Honors College course per semester is recommended to achieve 24 Honors College credits by graduation. This will vary based on each student's needs and academic plan.

Students must have a 3.0 final cumulative GPA to graduate with Honors College distinction. Students will not be removed from the Honors College if they have a GPA below 3.0 at any point.

ACADEMIC POLICY

Academic Responsibility

Candidates for a professional or graduate degree from LIU Pharmacy are expected to know the graduation requirements set forth in this publication. It is the responsibility of the student to know and comply with the academic requirements and regulations of the college as well as those of LIU.

All students must seek the counsel of an academic advisor. Students must also meet basic standards of performance established for each class with respect to attendance, promptness in completing assignments, correct English usage, accuracy in calculations, neatness and general quality of workmanship. Fulfillment of these fundamental responsibilities must be recognized by the student as an essential prerequisite to achieving satisfactory academic standing and to being recommended by the faculty for a degree.

Student Academic Standing

In accordance with University regulations, only students who have been admitted to the University, have formally registered, and are in good financial standing, may attend classes.

Students in years one or two of the Pharm.D. program may take 12-19 credits during each fall and spring semester. Students in years one or two of the Pharm.D. program are charged additional tuition at the per-credit rate for credits taken above 19.

Pharm.D. students are considered graduate students once they enter the year five curriculum and are enrolled in 500-level classes.
Full Time Status:

- Undergraduate (years 1 - 4) - a student carrying at least 12 credits per semester
- Graduate (years 5 and 6) - a student carrying at least 9 credits per semester

Students with excessive W's or INC's (or both) on their records may be considered as failing to make satisfactory progress toward completion of their programs of study and may be ineligible to continue until remedial steps have been taken

Students are required to successfully complete all required third-year PharmD courses before moving forward to any fourth-year courses. Students are required to successfully complete all required fourth-year PharmD courses before moving forward to any fifth year courses. Students are required to successfully complete all required fifth-year PharmD courses before moving forward to any sixth year courses.

Pharm.D. Students:
Third-Year Student: A student who has completed the preprofessional requirements with a preferred GPA of 3.000
Fourth-Year Student: A student who has finished all third-year courses with a minimum GPA of 2.000
Fifth-Year Student: A student who has completed all fourth-year courses with a minimum GPA of 2.000
Sixth-Year Student: A student who has completed all fifth-year courses with a minimum GPA of 2.000

Summer Session(s)

Starting the 2026 - 2027 academic year the "remediation" exam at the end of semesters is no longer being offered. Any student who does not receive a passing grade in a course will be required to repeat the course when it is next offered . Not all courses will be offered in the summer and are subject to be canceled due to lack of enrollment or faculty availability. If a course is not offered in the summer the student will be required to take it in the semester that it is next offered in order to progress in the program.
Summer Course Policy:

- Summer session I courses will be offered to eligible students who have failed a Fall course. The SAPA office will communicate with each eligible student to document which courses they may register for.
- Summer session II courses will be offered to eligible students who have failed a Spring course, and/or have been unable to progress to the Spring semester due to a Fall course failure. The SAPA office will communicate with each eligible student to document which courses they may register for.
- Summer courses are not available to students who have withdrawn (W) from a course.
- Students may participate in a maximum of three courses per summer session.
- Summer courses do not allow a remediation exam. The final course grade will stand.
- Summer course grades will be documented on the student transcript. The original grade for the course will also remain on the transcript and will count towards any probation or dismissal status.
- Summer courses will be selected and scheduled based on faculty availability and class census and at the discretion of the SAPA office.
- The courses in the Summer sessions follow the programmatic progression guidelines as documented in the Student Handbook. Students must complete courses in an order that aligns with the pre-requisite and co-requisite requirements and follow the programmatic progression guidelines of the PharmD program.
- Students may not enroll in summer courses which have conflicting time schedules. In this case, the student may only select one of these courses.
- Students may not participate in two MOST courses simultaneously in any summer session.

Residency / Policy for Taking Courses at Another Institution

All courses for the professional phase of the Doctor of Pharmacy program (years 3-6) must be taken in residence at LIU Pharmacy. Pre-professional matriculated students at LIU Brooklyn may refer to the LIU Brooklyn Catalog page 28 "Policy for Taking Courses at Another Institution."

Grading and Grade Point Average

Credits are granted for undergraduate courses completed with the grade of A, A-, B+, B, B-, C+, C, C-, D, or P. A grade of F signifies failure and no credit is awarded.

Credits are granted for graduate courses completed with the grade of A, A-, B+, B, B-, C+, C, or P. A grade of F signifies failure and no credit is awarded.
The University employs the following grade conversion guidelines:

Letter Grade	Percent Grade	4.0 Scale
A	93 - 100	4.000
A-	90 - 92	3.667
B+	87 - 89	3.333
B	83 - 86	3.000
B-	80 - 82	2.667
C+	77 - 79	2.333
C	73 - 76	2.000
C-	70 - 72	1.667
D	65 - 69	1.000
F	Below 65	0.000

A grade of Incomplete (INC) may be assigned if a student has failed to complete part of the required course work. An INC is given by the faculty member. It is the student's responsibility to make specific arrangements with the instructor to complete the course work and to have the grade submitted to the Office of the University Registrar within 2 semesters of the term in which the INC was earned.

INC grades will convert to INX (Expired INC) if the work is not completed within 2 semesters. If an unusual extension of time is necessary to complete the work, permission is required from the Vice President of Academic Affairs, and the grade change must be approved by the faculty member,

the chairperson, and the dean. Upon completion of the INC grade, the grade date the work was completed is indicated on the transcript. INC grades in Thesis and Dissertation courses do not lapse to INX provided the student continues to enroll in Maintenance of Matriculation.

Students who never attended or stopped attending before the course withdrawal deadline date as defined in the academic calendar and did not properly withdraw by published deadline may be assigned a grade of NC - No Credit earned.

The W grade is automatically assigned when a student officially withdraws from a course by the published deadline dates in the academic calendar. View Withdrawal Policy.

Students who receive grades of W (withdrawal), NC (unauthorized withdrawal), INC (incomplete) or an opted Pass/Fail in the fall or spring semester are ineligible for inclusion on the Dean's List for that semester.

Students have the option to repeat a course. In the event that individual programs have their own policies on repeating a course, the more restrictive policy will apply. Credits will be earned only once, and although the original grade remains on the student's permanent record, the second grade (whether higher or lower) will be used in computing the grade point average. No student who has taken a course and received a passing grade in it may repeat that course for credits after he or she has taken a related course containing content of a higher level. A course may not be repeated more than once, except with the prior approval, following procedures contained in the Academic Catalogs. If a course is taken more than twice, all grades after the first grade will be computed into the student's GPA. To be considered for graduation with honors, the student's average shall include only the grade given to that student the first time he or she has taken any specific course.

Required courses in which a grade of F was earned should be repeated within one year.

Students are responsible for monitoring their major and cumulative averages to ensure they are meeting their requirements for graduation, as well as the requirements for satisfactory academic progress.

Undergraduate students are permitted to opt for a pass/fail grade in a maximum of one course per semester for a total of eight semesters. Pass/Fail option does not apply to courses in the student's major, to courses that are prerequisites to or required by the major, or to courses that are used to satisfy the core requirement. The election of the pass/fail grading system must be designated by the 10th week of the semester, as listed in the Academic Calendar. All requirements of examination and work assigned by the instructor must be fulfilled. If a grade of P is assigned, credits are earned for the course but the grade is not calculated into the GPA. If a grade of F is assigned, the F is calculated into the GPA.

Students must achieve designated GPAs in order to graduate. Graduate students must achieve an overall Grade Point Average (GPA) of 3.00 to graduate. Undergraduate students must achieve an overall grade point average (GPA) of 2.00 to graduate. In some departments requirements may be higher (see departmental requirements). In the major area, the student must achieve an average of at least 2.00; in certain programs the minimum major average may be higher.

Quality points for a specific course are determined by multiplying the corresponding quality points (see below) for the grade received in the course by the number of credits awarded for the course. Total quality points are determined by adding all quality points for all courses. The grade point average (GPA) is determined by dividing the total quality points by the total number of credits, including those of failed courses. The grades W, NC and P are not counted in the GPA computation nor are the grades for courses taken at another college or university. All courses taken at any LIU campus or offered by LIU at off-site locations will be computed into the student's cumulative and major averages.

Grade Quality points per credit
- A 4.000
- A- 3.667
- B+ 3.333
- B 3.000
- B- 2.667
- C+ 2.333
- C 2.000
- C- 1.667*
- D 1.000*
- F 0.000

* not used for graduate level courses

Undergraduate students must maintain the following quality-point ratios to be in good academic standing:
- 1.8 if they have accumulated up to 29 credits
- 1.9 if they have accumulated 30 to 59 credits
- 2.0 if they have accumulated 60 credits or more

GPA computations are carried to the third decimal place from which rounding takes place to the second decimal place. On all official LIU transcripts, a GPA will be displayed to three decimal places with the third decimal place always being zero due to rounding. Major GPAs are calculated using all courses required in a student's major (excluding core and co-related courses).

Grades of "P" are not computed into the overall GPA, but do count towards graduation credits.

Pass/Fail Option

Students may take a maximum of two courses on the Pass/Fail (P/F) basis per academic year (which includes winter, summer, weekend sessions, and all other newly created sessions, for a total of not more than 24 credits in a student's resident undergraduate program). This restriction does not apply to courses offered only on the P/F basis. A grade of "P" will be posted on the student's transcript only if the actual grade earned is a "D" or better. Only elective courses may be taken on a Pass/Fail basis. Core courses may not be taken on a Pass/Fail basis. "P" grades are not calculated into the GPA, but credits are earned for the course. "F" grades are calculated into the GPA. Core courses, courses in a student's major, and co-related courses may not be taken as P/F without the written permission of the major or minor department chair or program director.

Students in Early Childhood and Childhood Education degree programs may not be allowed to take any courses in their academic concentrations (30-credit liberal arts concentrations in the College of Liberal Arts and Sciences) on a Pass/Fail basis. Students who opt for a Pass/Fail during the fall or spring semester are not eligible for inclusion on the Dean's or Honor's List for that semester. Students may choose the P/F option up to the 10th week of the regular semester as specified in the academic calendar. Changes will not be considered after the deadline date.

To graduate with honors, a student must take at least 54 graded credits at LIU Post, not including courses taken on a Pass/Fail basis or Life Experience credits.

Grade Changes

A faculty member may change a grade in situations where it is warranted within one year of assigning the original grade. Changes to grades cannot be made once a degree has been conferred unless the student has submitted an appeal. In the event that a graduating student appeals a grade through the formal grade appeal process, a grade may be changed at the conclusion of the appeal process.

Any request to change a grade after the one year period referenced above must be submitted to the chair and dean for review and approval.

Dean's List

Eligibility for the Dean's List is evaluated after each fall and spring term and is determined by grades earned in the regular academic semesters (fall and spring). Summer Session grades are not considered.

Only Undergraduate or Professional Students are considered for Dean's List; the designation does not apply to students in graduate (MS or Ph.D) programs.

Degree-seeking/matriculated students who complete at least 12 credits and achieve a grade point average of at least 3.50 in any one semester are placed on the Dean's List for that semester. Students who earn an F, W, NC, U or INC in any semester, even though the symbols are subsequently changed to grades, are not placed on the Dean's List for that semester. Students who opt for a course Pass/Fail are not eligible for inclusion on the Dean's List. A student who does not receive an official grade in any semester will not be placed on the Dean's List until official grade submission, excluding those listed above, that otherwise qualifies the student for the Dean's List.

Attendance

Successful work in LIU Pharmacy is dependent upon regular patricipation in classroom activities.

Preprofessional pharmacy students should consult the LIU Brooklyn Undergraduate Bulletin regarding attendance requirements.

To successfully pass a course, students are required to participate in all course activities as outlined in the course syllabus. Attendance for recitations, laboratories and Introductory and Advanced Pharmay Experiences, as well as remedial work designed to enhance students' learning, is required of all students in years P-3, P-4, P-5 and P-6. Students in experiential programs may be permitted to leave the sites if returning to campus for special events, upon the approval of the preceptors.

Tardiness

Students are expected to be present from the beginning of classes and laboratories until the instructor dismisses them. Students are expected to comply with the hours set by preceptors for experiential courses. If students arrive late, they may be denied admission or marked absent. Habitual tardiness and/or failure to attend hours set by preceptors for experiential courses may impact negatively on the evaluation of a student's performance.

Student Absence due to Religious Reasons

Students who anticipate being absent because of a religious observance will notify their respective faculty at the beginning of the semester. The University complies with Section 224-a of New York State Education Law–Absence Due to Religious Observation.

Notification of Student Rights Under Section 224-a of New York State Education Law –Absence Due to Religious Observation

Under § 224-a of the NYS Education Law: "Any student in an institution of higher education who is unable, because of his or her religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his or her religious beliefs, an equivalent opportunity to register for classes or make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity."

Graduation Requirements

Upon recommendation of the faculty and approval by the board of trustees, the Doctor of Pharmacy is conferred by LIU upon a candidate who has met the following requirements:

1. Satisfactory completion of the full prescribed curriculum or two or more years in this college and the required equivalent courses in some other registered and accredited college of pharmacy, or departments of a university.
2. Maintenance of a 2.000 or "C" cumulative GPA in all preprofessional coursework completed and, separately, in the professional courses offered in the years P3 through P6.
3. Successful completion of all co-curricular requirements P3-P6.
4. Satisfactory completion of Professional Development Portfolio requirements.
5. Satisfactory completion of Interprofessional Education requirements.
6. Settlement of all accounts with the university, including the graduation fee.
7. Evidence of good ethical and professional character.

Students have until the time of their graduation to have changes made to their academic records. Once a student has graduated, the academic record cannot be changed retroactively.

Degrees with Distinction

Students in the Pharm.D. program who have completed at least 60 percent of their credits in residence at the college and have achieved a grade point average of 3.500, 3.700, or 3.900 may receive a Doctor of Pharmacy degree *cum laude, magna cum laude,* or *summa cum laude,* respectively.

Latin Honors do not apply to graduate programs (M.S. or Ph.D.)

Academic Standards

The college reserves the right to dismiss, suspend, or probate, at any time, a student whose academic record is unsatisfactory. Prior notification or prior academic probation is not a necessary precursor to academic dismissal or suspension of students who have unsatisfactory academic records or progress. Any student who at any time fails to demonstrate satisfactory progress shall be subject to immediate academic dismissal or suspension upon determination or opinion of the college that the noncompliance with satisfactory progress is of such nature that a period of academic probation shall not be afforded to the student. To be in good standing, a student must make satisfactory progress toward fulfilling all requirements of the program in which he or she is enrolled. Failure to do so will be cause for academic dismissal.

Satisfactory progress is ordinarily demonstrated by completing the professional phase of the Doctor of Pharmacy program in the projected four-year time frame; completing the necessary required and elective courses; maintaining an overall cumulative GPA of 2.000 or greater in all courses attempted; maintaining a cumulative GPA of 2.000 or greater in all professional pharmacy courses attempted that are herein prescribed for the professional phase of study; achieving a semester, term or session GPA of 2.000 or greater for each semester, term or session attended; and satisfactory and timely completion of additional program requirements, such as certification in first aid and cardiopulmonary resuscitation, and certification in pharmacist-based immunization delivery.

LIU Pharmacy is cognizant that there may be a variety of reasons why students may not complete the professional phase of the Doctor of Pharmacy program in the projected four-year time frame. Students who meet all other requirements for satisfactory progress ordinarily are not considered to be making unsatisfactory progress, should they require additional courses as a result of their LIU Brooklyn English and/or mathematics placement, should personal circumstances require a leave of absence from the college or a reduced schedule, if service requirements for students serving in the armed forces of the United States delay their progress, or if progress has been delayed as a result of unsatisfactory completion of the course(s) or as a condition of required remediation due to the academic probationary status of the student. Upon entering the professional phase of the program (third year) the maximum allowable time for the completion of all requirements and the awarding of the Doctor of Pharmacy degree is six years for the projected remaining four years (third, fourth, fifth, and sixth years), exclusive of time spent in the armed forces. Students may file a request for an extension of the maximum allowable time with the Assistant Dean for Academic and Student Affairs. Students should include in their request an explanation of the circumstances under which they require an extension to complete their degree requirements.

The Assistant Dean for Academic and Student Affairs will consider the request and may consult with the college's Scholastic Committee regarding the request. The student will be duly notified as to whether or not his or her request for an extension has been granted. Any courses outside the time limit will not count as credits toward the degree unless approved in writing by the Assistant Dean for Academic and Student Affairs.

Failure to satisfy any of the indicators of satisfactory progress is cause for academic dismissal, suspension, or probation and any one or more of the three (dismissal, suspension, or probation) will be applied immediately upon failure to maintain satisfactory progress. If dismissal or suspension are not applied, then probation will apply.

Academic probation is most typically the initial official action for a student failing to make satisfactory progress. Every attempt is made by LIU Pharmacy to duly notify students that they have been placed on probation. Students in LIU Pharmacy, as students enrolled in a professional program, are expected to be fully aware of the requirements for satisfactory progress and are expected to be fully capable of determining whether their own academic progress is in compliance with the requirements for satisfactory progress. As such, all students are further expected to understand that if academic dismissal or suspension is not immediately applied in their case that their status is probationary, whether or not they receive notification from LIU Pharmacy in that regard. All students failing to make satisfactory progress are expected to take initiative towards remediation of unsatisfactory progress.

Early Intervention Program

- The early intervention program identifies students in academic difficulty through a close monitoring of grades throughout the semester.
- Course Coordinators and instructors are encouraged to notify the Office of the Assistant Dean for Student Academics and Professional Affairs of any student who has earned a grade of C- D or F on an assessment.
- Additional platforms can be utilized to identify students in need. Pharmacy Advisors will reach out to the students who were identified and set-up a meeting and offer guidance and a plan of action to increase academic results. Students are encouraged to reach out to the advisor when struggling, and to not wait for an advisor to reach out to them.
- The Office of Academic and Professional Affairs notify students when academic support workshops are available to students. Students are encouraged to attend those sessions. Workshop topics include but are not limited to...
- It is the student's responsibility to reach out to their Pharmacy Advisor if they are struggling in a course.

Grade Point Average (GPA)

Calculation of the *professional* grade point average (GPA) will include all required professional courses and PHM electives completed when enrolled in the Doctor of Pharmacy Program. All courses taken at LIU are included in the *cumulative* GPA. Semester and professional GPA will be reviewed at the end of course completion for courses that complete within a semester and at the end of each semester, summer, and professional year. Students must achieve a semester, term or session GPA of 2.00 (4.00 scale) or greater for each semester, term or session attended during the College's Professional Program to remain in good/acceptable academic standing. Students must maintain an overall cumulative GPA of 2.00 (4.00 scale) or greater in all courses attempted during the College's Professional Program to remain in good/acceptable academic standing.

Academic Probation

Academic Review

Students who qualify for academic review but are not on probation will be required to meet with their advisor throughout the semester regarding their academic progression**.** Students may be recommended to participate in the specified study or help groups, or probationary workshops.

Academic Risk

Students that qualify for Academic Risk will be required to:

- Meet with their Academic Advisor twice a semester
- Will be assigned a Faculty Mentor from the Scholastic Committee and will be required to meet with them twice a semester
- Attend workshops that are hosted from the Office of Student Academic and Professional Affairs
- A student on Academic Risk is barred from holding any office, chair, or committee seat in such clubs, organizations, and fraternal societies, and from serving on any standing committee, and from traveling on behalf of the College or University
- A student on Academic Risk is barred from participating in reseach projects either in a volunteer status or as part of PHM599 as outlined in the syllabus.

Academic Probation

Academic Probation represents notice to a student demonstrating an ongoing subpar academic performance. The maximum number of semesters, terms or sessions exclusive of summer sessions, of academic probation permitted, is two during the professional phase (P-3, P-4, P-5 and P-6) of study.

- The two semesters may be either consecutive or separate.
- A student on probation for two consecutive semesters will be afforded a comprehensive plan to return to an acceptable academic standing.
- A student who would qualify for a third semester of probation will be academically dismissed from the college.
- Any student on academic probation must meet with their academic advisor and faculty mentor a minimum of twice in a semester and will be required to attend academic workshops.
- A student will be notified in writing of placement on academic probation. A student will be removed from academic probation when the student demonstrates adequate academic performance.

Extracurricular Activities during Academic Probation

- A student who has been placed on academic probation is limited from participating in extracurricular activities.
- A student on probation may hold membership in clubs, organizations or fraternal societies.
- A student on probation is barred from holding any office, chair or committee seat in such clubs, organizations, and fraternal societies, and from serving on any standing committee, and from traveling on behalf of the College or University.
- A student on probation may attend lectures or other events sponsored by such clubs, organizations, and fraternal societies and/or by the college that are deemed to be of an educational nature.
- A student on probation is barred from participating in research projects either in a volunteer status or as part of PHM599 as outlined in the syllabus.

Academic Delay

- A corrective plan to minimize the student's academic delay will be drafted by a College of Pharmacy academic advisor in consultation with the student and approved by the Assistant Dean for Academic and Student Affairs for the College of Pharmacy.
- Corrective plans are per academic year.

GPA/Grade Combination Status Recommendation

The following table outlines recommendations based on GPA and/or grade combinations earned in a single semester or earned cumulatively throughout the professional Doctor of Pharmacy Program:

GPA/Grade Combinations: Students graduating 2029 or after	**Recommendations if GPA/Grade Combinations Earned: Students graduating 2029 or after**	
	Single Semester	**Cumulative in Professional Phase**

GPA less than 2.0	Academic Probation	Academic Probation or Dismissal
One Letter Grade C- or Below	Academic Review/Must repeat course	Not Applicable
Two Letter Grades C- or Below	Academic Probation/Must repeat course(s)	Academic Review/Academic Probation
Three Letter Grades C- or Below	Academic Probation/Academic Risk/Must repeat course(s)	Academic Risk
GPA/Grade Combinations: Students graduating 2028 or before	**Recommendations if GPA/Grade Combinations earned: Students graduating 2028 or before**	
	Single Semester	***Cumulative in Professional Phase***
GPA less than 2.00	Academic Probation	Academic Probation or Dismissal
One Letter Grade D or Below	Academic Review/ Must repeat F	Not Applicable
Two Letter Grades D or Below	Academic Probation/ Must repeat F	Academic Review/ Academic Probation
Three Letter Grades D or below	Academic Probation/ Academic Risk/ Must repeat F	Academic Risk

Repeating Courses

- Students may repeat any course to improve the grade, no matter what the previous grade. The second grade, whether higher or lower, will be used in the computation in the GPA. To repeat a course more than once, students must have permission from the Assistant Dean for Academic and Student Affairs. If a course is taken more than twice, all grades after the first will be computed into the student's GPA.
- Students graduating in 2028 or before: Any professional course in which a grade of F was earned, must be successfully repeated as soon as the course is offered again (exclusive of summer sessions).
- Students graduating in 2029 or after: Any professional course in which a grade of C-, D or F was earned must be successfully repeated as soon as the course is offered again (exclusive of summer sessions)
- A course in which a grade of C was earned, may be repeated only if all courses in which a grade of F, D, or C- previously earned have been successfully repeated with a grade of C or better.
- A required course in the professional curriculum may not be repeated more than twice. Failing a required professional course three times is cause for dismissal. Credit will be earned only once, and the second grade, whether higher or lower, will be computed in the student's GPA. After the second time, a student takes a course, all grades except the first will be computed in the student's GPA.
- The college is not obligated to offer courses that the student has failed in the academic term immediately following the failure.

Course Remediation

Refer to Didactic Course Remediation for the Doctor of Pharmacy Program Policy.

Academic Suspension

Academic suspension may occur in those cases when it is the determination of LIU Pharmacy that the particulars of a student's failure to achieve satisfactory progress are of such nature that a period of time away from the college would likely improve the prospects for remediation of unsatisfactory progress when the student is permitted to resume his/her studies. By way of example, academic suspension might be prescribed when a student indicates that his/her failure to maintain satisfactory progress is due to some type of personal circumstances, such as infirmity, family problems or economic difficulties. In such cases, the college may require a period of academic suspension of from one-to-two semesters of study until such time that the extenuating causes that have been determined to be factors in the student's unsatisfactory progress have been reasonably ameliorated. Academic suspension may also be applied when the student's academic difficulties have created a situation where he/she may need to repeat courses in order to meet the prerequisite qualifications to move forward into the next term of study.

Academic suspension may also be applied due to discplinary actions/outcomes.

Academic Dismissal

The college reserves the right, as previously noted, to academically dismiss a student at any time if a determination is made, after a thorough review by the Assistant Dean for Academic and Student Affairs and/or the Scholastic Committee of the college, that the student's academic record is unsatisfactory or otherwise does not comply for any reason with the standards of satisfactory academic progress.

The following table outlines academic situations where an academic dismissal will be applied: These grade cominations include ALL non-experiential courses in the PharmD curriculum (including required lectures, laboratory, recitation, and elective courses)

Professional Cumulative Grade Combinations for Students Graduating 2029 or After (Cumulative Grades include both initial and new grades for repeated courses)	Three letter grades of F or a total of four letter grades of C- or below
Semesters of Probation for Students Graduating 2029 or After	3 Semesters
Professional Cumulative Grade Combinations for Students Graduating 2028 or Before (Cumulative Grades include both initial and new grades for repeated courses)	Three letter grades of F or a total of four letter grades D or below
Semesters on Probation for Students Graduating 2028 or Before	3 semesters

Appeal Process of Academic dismissal or progression

A student may appeal an academic dismissal or progression in the professional phase of the Doctor of Pharmacy Program by petition to the Scholastic Committee of the College in writing. The petition should include a thorough analysis by the student of the reasons for having failed to maintain satisfactory academic progress. The petition must also include a comprehensive plan for rectifying the student's deficiencies within a reasonable period of time. The appeal is considered by the Scholastic Committee who makes a final recommendation to the Assistant Dean for Student Academic and Professional Affairs. Students are advised that successful appeals of academic dismissals are rare and usually occur only in those circumstances where substantive underlying causes for unsatisfactory academic progress were previously unknown to the college. Generally, as noted above, in cases where substantive underlying causes exist for unsatisfactory progress, an extension of academic probation will have been granted to allow the student additional opportunity to remedy his/her noncompliance with satisfactory academic progress.

Decisions of the Scholastic Committee and/or the Assistant Dean for Student Affairs that a student believes may demonstrate arbitrary and capricious treatment or to be fundamentally unfair may be appealed, as a final step, to the Council of Deans. The student should provide a written petition once they received notification.

The Council of Deans may grant an appeal only if a student can demonstrate one of the following:

- Further documentation (e.g. death certificate, proof of hospitalization) not available to the Committee at the time of initial decision

- Extenuating circumstances or alternative solutions to the decision
- Documented bias of one or more Committee members
- Procedural error

Readmission

Students who are dismissed from the College and are granted an opportunity to be readmitted will have stipulations placed upon their readmission. These stipulations may include a requirement that a student repeat course(s) previously taken, regardless of the grade(s) earned in the course(s). Students may be required to repeat an entire year or years of the Professional Doctor of Pharmacy Program. Other stipulations may include but are not limited to the following: regular follow-up with an advisor or faculty member; obtaining specific medical or physiological care; participation in specified study or tutoring group; participation in probationary workshops.

Students who are readmitted to the College following academic dismissal may be readmitted on probationary status with the following requirements:

- Maintain a minimum GPA of 2.0 with no earned grade of C- D or F and no option of remediation
- If dismissed a second time from the Doctor of Pharmacy Program, the student will not be allowed to apply for re-admission or allowed to appeal the second dismissal
- Create and maintain a plan of action, and submit documentation to support the plan of action.
- Additional requirement assigned by the Assistant Dean of Student Academics and Professional Affairs

Criminal Background and Drug Checks

A criminal conviction and/or the use of illegal drugs may impede or bar your entry into your chosen field of study. Students seeking entrance into many fields of study including counseling, education, and health and human services professions should be aware that a criminal record can result in the refusal of licensing/certification /registration agencies to issue the credential needed to practice in that field of study. Prospective and current students are urged to contact the pertinent state and/or federal licensing agency to inquire whether a criminal record will have an impact on licensure or certification eligibility. Many clinical/field experience affiliates now require the completion of criminal background checks and/or drug testing for employees, volunteers and students affiliated with the site. Therefore, students who plan to participate in a clinical/field experience during the Doctor of Pharmacy Program will be asked to undergo a criminal background check, and/or a drug screen according to established policies. All screenings are to be done at the student's own expense and only those completed by the approved program vendor(s) will be accepted. Students should be aware that our clinical/field affiliates may reject or remove a student from the site if a criminal record is discovered or if a drug test is positive. In the event that a student is rejected from a clinical/field site due to information contained in the criminal background check or drug screen, the student may be unable to complete a required clinical/field experience. In such an event, the student may be advised to withdraw from the LIU Pharmacy Program

Policy/Procedure on Criminal Background Checks for Doctor of Pharmacy Students

Process/procedures

LIU Pharmacy requires each student in the professional program to obtain an annual criminal background check report. The Office of Experiential Education uses CastleBranch to perform background checks. Contact information for CastleBranch is as follows:

• Toll-free: 888.914.7279

• Email (for students): servicedesk.cu@castlebranch.com

• https://portal.castlebranch.com/LQ33

The Office of Experiential Education initiates the background check process by emailing the students a reminder of this requirement and provides a deadline for completion. Instructions for completing the criminal background checks are found on RxPreceptor by going to "Communications/Support" then "Document Library". The document is titled, "Instructions for Completing a Criminal Background Check". Students are required to follow all instructions provided by CastleBranch and complete the process within the allotted time frame. Failure to complete the screening within the allotted time frame may result in an inability to participate in experiential education, including withdrawal from assigned course/site, and possible disciplinary action. Students are responsible for all fees associated with the screening. Results of the background checks are available to students by the vendor (CastleBranch) within a few days after completion. It is the student's responsibility to obtain copies of his/her reports to share with experiential sites upon request. Instruction for obtaining copies of reports may be found on RxPreceptor by going to "Communications/Support" then "Document Library". The document is titled, "Instructions for obtaining a copy of Criminal Background Check Report". Completed reports are also emailed to the Office of Experiential Education by the vendor. Results from a company other than CastleBranch will not be accepted by the College. Practice sites may request that students complete additional background checks. It is the responsibility of the student to comply with site policies for background checks and/or provide practice sites with a copy of the results (if requested). Practice sites reserve the right to require screening by any vendor acceptable to them. Any questionable findings from the criminal background check will be flagged by CastleBranch and will be reviewed on an individual basis by the members of the Office of Experiential Education and may be shared with the Criminal Background Check and Drug Screening Review Committee, Assistant Dean for Student Academic and Professional Affairs legal counsel, or other designated individuals. Questionable findings obtained from criminal background checks may delay or prevent students from completing introductory and/or advanced pharmacy practice experiences (IPPEs and/or APPEs), continuing in the program, and/or graduating.

Review of Background Check Results

Students have the right to review the information reported by the designated vendor for accuracy and completeness and to request that they verify that the criminal background information provided is correct. All disputes pertaining to the criminal background check findings must be communicated in writing directly to the contracted company that conducted the check (Email for students: servicedesk.cu@castlebranch.com). In addition, the student must inform the Office of Experiential Education by emailing a copy of the complaint statement to Brian.Yeung@liu.edu and include "Dispute of Criminal Background Check Results" in the subject line. Re-verification will be made if the company determines that reasonable grounds exist. If parts of the report are deleted or changed because of verification, the Office of Experiential Education and the student will receive a corrected report. Results from the criminal background check will be reviewed as follows:

- The report submitted to the College by the vendor will be reviewed by members of the Office of Experiential Education.
- If the report shows a questionable finding, a representative from the Office of Experiential Education may request that the student submit additional information relating to the finding(s) on the report, such as a written explanation, court documents and/or police reports.
- Prior to making a final determination that will adversely affect the student, the Office of Experiential Education will inform the student of his or her rights and the procedures regarding how to challenge the accuracy of the criminal background check report.
- If deemed necessary, The Director of Experiential Education will submit the report and any additional information provided by the student for review by other designated individuals, such as but not limited to, The Criminal Background Check and Drug Screening Review Committee. The Director of

Experiential Education will forward this information as soon as possible after the disclosure or discovery of the questionable finding(s).

- If convened, the Criminal Background Check and Drug Screening Review Committee will review all information provided and provide a formal, written recommendation to the Assistant Dean for Student Academic and Professional Affairs. Recommendations from the Criminal Background Check and Drug Screening Review Committee may include:
  - Allow the student to proceed in the academicvprogram without restriction
  - Allow the student to proceed in the academic program with specified terms and conditions
  - Suspend the student or arrange for a leave of absence to address the issue(s) identified
  - Dismiss the student

The Assistant Dean for Student Academic and Professional Affairs will review the Committee's recommendation and make a final decision, which will be communicated to the student and the Office of Experiential Education in writing. The Assistant Dean for Student Academic and Professional Affairs, with or without the involvement of other designated individuals, may dismiss the student, suspend the student, or require the student to comply with specific terms and conditions for any duration of participation in the program. Notification from the University/College that a student is dismissed, suspended, or otherwise required to comply with set conditions will be done via a letter from the Office of Student Academic and Professional Affairs. A student may appeal that decision in accordance with the University's grievance procedure found in the LIU Pharmacy Bulletin and on the Long Island University website at http://www.liu.edu/Brooklyn/Academics/Bulletins/Pharmacy-Bulletin.

College Disclaimer

The LIU Pharmacy Criminal Background Check process does not guarantee the safety of students, patients, faculty, or staff. In addition, an acceptable criminal background check, as defined by the College, state, or experiential site; does not guarantee the student will be eligible to complete the program or obtain a license to practice pharmacy upon graduation.

Fair Credit Reporting Act

If an employer hires an outside individual or firm to conduct a criminal background check, the employer is subject to the Fair Credit Reporting Act (FCRA). Although FCRA does not explicitly include educational institutions, the applicability to colleges and schools of pharmacy may depend on legal interpretation and circumstances. A link to an individual's rights under the federal Fair Credit Report Act (FCRA) 15 U.S.C. § 1681 et seq. A copy of the FCRA is available online at http://www.ftc.gov/bcp/conline/pubs/credit/fcrasummary.pdf.

Policy/Procedure Drug Screening for Doctor of Pharmacy Students Process/procedures

LIU Pharmacy requires each student in the professional program to obtain an annual random drug screen. The Office of Experiential Education uses CastleBranch to perform drug screening. Contact information for CastleBranch is as follows:

• Toll-free: 888.914.7279
• Email (for students): servicedesk.cu@castlebranch.com
• https://portal.castlebranch.com/LQ33

Students are made aware of the requirement during initial orientation at the beginning of the P-3 year but since screening is random, they are not provided the time frames in advance. The Office of Experiential Education initiates the drug screen process by emailing the students a reminder of this Pharmacy Catalog 2025 - 2026 requirement and instructs each student to go to certain commercial laboratories to have the drug screen performed. Many affiliated laboratories have early morning, late evening, and/or weekend hours. The screening is required at a minimum once per year but additional, more frequent screenings may be required by individual sites.

The time frame for completion of the drug screen is provided to students in the email and is usually within 72 hours from the time of notification. Instructions for completing the drug screen are found on RxPreceptor by going to "Communications/Support" then "Document Library". The document is titled, "Instructions for Completing a Drug Screen". Students are required to follow the instructions provided by CastleBranch and complete the process within the allotted time frame. Failure to complete the screening within the allotted time frame may result in an inability to participate in experiential education, including withdrawal from the assigned course/site, and possible disciplinary action. Students are responsible for all fees associated with the screening.

Results of the drug screening are available to students by the vendor (CastleBranch) within a few days after completion. It is the student's responsibility to obtain copies of his/her reports to share with experiential sites upon request. Instruction for obtaining copies of reports may be found on RxPreceptor by going to "Communications/Support" then "Document Library". The document is titled, "Instructions for obtaining a copy of Drug Screening report". Completed reports are also emailed to the Office of Experiential Education by the vendor. Results from a company other than CastleBranch will not be accepted by the College. Practice sites may request that students complete additional and/or more frequent drug screening. It is the responsibility of the student to comply with site policies for drug screening and/or provide practice sites with a copy of the results (if requested). Practice sites reserve the right to require screening by any vendor acceptable to them. Any undesirable findings from the drug screen will be flagged by CastleBranch and will be reviewed on an individual basis by the members of the Office of Experiential Education and may be shared with the Criminal Background Check and Drug Screening Review Committee, Assistant Dean for Academic and Student Affairs, legal counsel, or other designated individuals. Undesirable findings obtained from drug screening may delay or prevent students from completing introductory and/or advanced pharmacy practice experiences (IPPEs and/or APPEs), continuing in the program, and/or graduating.

Review of Drug Screen Results

Students have the right to review the information reported by the designated vendor for accuracy and completeness and to request that they verify that the drug screening information provided is correct. All disputes pertaining to the drug screen findings must be communicated in writing directly to the contracted company that conducted the check (Email for students): servicedesk.cu@castlebranch.com. In addition, the student must inform the Office of Experiential Education by emailing a copy of the complaint statement to Brian.Yeung@liu.edu and include "Dispute of Drug Screening Results" in the subject line. Reverification will be made if the company determines that reasonable grounds exist. If parts of the report are deleted or changed because of re-verification, the Office of Experiential Education and the student will receive a corrected report. Results from the drug screen will be reviewed as follows:

- The report submitted to the College by the vendor will be reviewed by members of the Office of Experiential Education.
- If the report shows undesirable finding(s), a representative from the Office of Experiential Education may request that the student submit additional information relating to the findings on the report, such as a written explanation, prescription(s) from a licensed physician, etc.
- Prior to making a final determination that will adversely affect the student, the Office of Experiential Education will inform the student of his or her rights and the procedures regarding how to challenge the accuracy of the drug screening report.
- Results indicated as "Negative Dilute" on the drug screening will require the student to re-test randomly with a 24-hour notice.
- If deemed necessary, The Director of Experiential Education or designee will submit the report and any additional information provided by the student for review by other

designated individuals, such as but not limited to, The Criminal Background Check and Drug Screening Review Committee.
- The Director of Experiential Education or designee will forward this information as soon as possible after the disclosure or discovery of the undesirable finding(s).
- If convened, the Criminal Background Checkand Drug Screening Review Committee willreview all information provided and provide aformal, written recommendation to the Assistant Dean for Student Academic and Professional Affairs. Recommendations from the Criminal BackgroundCheck and Drug Screening Review Committee may include:
  - Allow the student to proceed in the academic program without restriction
  - Allow the student to proceed in the academic program with specified terms and conditions
  - Suspend the student or arrange for a leave of absence to address the issue(s) identified
  - Dismiss the student
  - The Assistant Dean for Student Academic and Professional Affairs will review the Committee's recommendation and make a final decision, which will be communicated to the student and the Office of Experiential Education in writing.
  - The Assistant Dean for Student Academic and Professional Affairs, with or without the involvement of other designated individuals, may dismiss the student, suspend the student, or require the student to comply with specific terms and conditions for any duration of participation in the program.

Notification from the University/College that a student is dismissed, suspended, or otherwise required to comply with set conditions will be done via a letter from the Office of Student Academic and Professional Affairs (SAPA). A student may appeal that decision in accordance with the University's grievance procedure found in the LIU Pharmacy Bulletin and on the Long Island University website at http://www.liu.edu/Brooklyn/Academics/Bulletins/Pharmacy-Bulletin.

College Disclaimer

The LIU Pharmacy Drug Screening process does not guarantee the safety of students, patients, faculty, or staff. In addition, an acceptable drug screen, as defined by the College, state, or experiential site; does not guarantee the student will be eligible to complete the program or obtain a license to practice pharmacy upon graduation.

Fair Credit Reporting Act

If an employer hires an outside individual or firm to conduct a drug screen, the employer is subject to the Fair Credit Reporting Act (FCRA). Although FCRA does not explicitly include educational institutions, the applicability to colleges and schools of pharmacy may depend on legal interpretation and circumstances. A link to an individual's rights under the federal Fair Credit Report Act (FCRA) 15 U.S.C. § 1681 et seq. A copy of the FCRA is available online at http://www.ftc.gov/bcp/conline/pubs/credit/fcrasummary.pdf.

Related Curricular Matters

Double Majors

Students pursuing the Doctor of Pharmacy program need the approval of the Assistant Dean for Academic and Student Affairs to pursue a double major.

Electives

Generally, students are expected to enroll in elective offerings of the Doctor of Pharmacy program of LIU Pharmacy to fulfill the elective requirements for the degree. On occasion, students may be granted permission to take graduate course offerings of LIU Pharmacy and/or course offerings from other colleges and schools of LIU Brooklyn. Students wishing to receive credit for the fulfillment of professional elective requirements for courses outside of those offered as professional electives must seek permission from the Assistant Dean of Student Academic and Professional Affairs in advance of enrolling in such courses. Students are expected to present written statements indicating their reasoning for enrollment in electives other than those offered through the Doctor of Pharmacy degree program. Three Courses (9 credits) of professional didactic elective courses are required. These can only be taken during years P4 and P5. Two courses (10 credits) of elective Advanced Pharmacy Practice Experiences are required.

Repeating Courses

- Students may repeat any course to improve the grade, no matter what the previous grade. To repeat a course more than once, students must have permission from the Assistant Dean for Academic and Student Affairs. The original grade stays on the transcript.
- Students graduating in 2028 or before: Any professional course in which a grade of F was earned, must be successfully repeated as soon as the course is offered again.
- Students graduating in 2029 or after: Any professional course in which a grade of C-, D or F was earned must be successfully repeated as soon as the course is offered again
- A course in which a grade of C was earned, may be repeated only if all courses in which a grade of F, D, or C- previously earned have been successfully repeated with a grade of C or better.
- A required course in the professional curriculum may not be repeated more than twice. Failing a required professional course three times is cause for dismissal. Credit will be earned only once, and the second grade, whether higher or lower, will be computed in the student's GPA. After the second time a student takes a course, all grades except the first will be computed in the student's GPA.
- The college is not obligated to offer courses that the student has failed in the academic term immediately following the failure.

Prerequisites

Students are not permitted to register for any professional course unless all science and math and Liberal Arts prerequisites have been successfully completed. Students are responsible for knowing the prerequisites for courses as stated in this catalog. Students found to be enrolled in a course for which they have not met the prerequisites will be withdrawn from the course regardless of the point in that course where the discovery is made. Students are advised that the lack or the failure of a prerequisite course may significantly impede their academic progress by preventing their enrollment in one or more subsequent courses. Many courses are offered only once a year; hence failure of a course may result in a delay of a year until such course is repeated and the student is authorized to enroll in subsequent courses.

STUDENT LIFE

Long Island University is an exciting and vibrant community that provides students with opportunities to become engaged on-campus, make life-long friendships, explore professional and career interests, or enhance their leadership skills and complement their in-the-classroom experience.

Through the Division of Student Affairs and The Center for Student Success and Coaching, students can participate in over 70 student organizations, join national fraternities and sororities, and attend over 1,000 events held each year. In addition, our robust Division I Athletic program is at the heart of Shark Nation. Residence halls also provide students the opportunity to live on campus while they complete their degree.

Students can be informed on various campus life programs and opportunities through EXPERIENCE | Shark Nation, the University's student engagement platform.

Experience Shark Nation

Experience | Shark Nation is the University-wide student engagement platform. Each student has access to Experience | Shark Nation and is encouraged to visit frequently for updates regarding campus events, programs, and activities. The platform is how students will join student organizations, learn about campus events, and mark their attendance using the Shark Points system.

In addition, a full listing of events is sent via email from The Center for Student Success and Coaching each week that highlights the opportunities students can take advantage of and shares the student engagement calendar. To access the platform, visit www.liu.edu/campus-life.

Division I Athletics

LIU is home to an accomplished and proud Division I athletics program that represents Shark Nation. Fielding 39 athletic teams on two campuses, LIU's NCAA Division I program builds on a foundation of tradition and excellence. In LIU's history, its teams have a combined 24 national championships, 248 conference championships, and 380 All-Americans. For more information on Athletics, visit liuathletics.com.

Student Organizations

There are over 200 student clubs and organizations for you to join at Long Island University. Participate in the Campus Involvement Fair each semester or visit Experience Shark Nation to join. It's also easy to start your own new student club. Meet with your Success Coach to discuss how to get started.

Student Government Association

The Student Government Association is the representative body of all students at Long Island University. SGA serves as an outlet for student voices to be heard by working closely with the administration and faculty to enhance the overall campus experience. All members share the common goal of bettering the campus community.

SGA elections take place twice a year and include an executive board, class presidents, commuter senators, resident senators, transfer senators, international senators, and at-large senators to represent all students.

SGA has weekly general meetings that are open for all students to attend.

LIU Cares

LIU students give back to the local and global communities through service organizations, charity events, and social awareness initiatives throughout the year. The LIU Cares initiative connects our students, faculty and staff, and alumni to the power of service through volunteerism and community engagement. Students can support a cause that is important to them or join one of the many opportunities that already exist.
Students typically perform more than 150,000 service hours and fundraise thousands of dollars for various charities each year. For more information on service opportunities, contact liucares.org or visit LIU Promise.

Residential Life

Resident students are part of an exciting college community that attracts students from all over the world. Residence halls are tailored to individual needs, from honors college housing to semi-private suites. Living on campus allows students to become totally immersed in college life. Students will enjoy the freedom of living on their own while meeting new people and making lasting friendships.
Living at LIU offers:

- Options for singles, doubles, triples, apartments, and suite-style
- All utilities, WiFi, and laundry included
- Convenient online housing and roommate selection process
- Late-night access to Fitness Center, Library, and other facilities
- Affordable housing rates
- Several meal plan options and dining locations
- Lounges in each building with TVs and computers
- Professional and peer staff in each residence hall for 24/7 assistance
- ID access and evening security for all buildings
- Floor and Hall programming

Residence Halls

- Conolly Hall (on-campus)
- Fulton Hall (off-campus, nearby)

Campus Recreation and Intramurals

University Recreation and Intramurals serves as an integral part of campus life. University Recreation provides engaging programs and state-of-the-art facilities and equipment to enrich the student experience and foster a lifetime appreciation of and involvement in wellness and recreational sports. Campus Recreation offers student and community membership, open gym and pool hours, access to the fitness center, opportunities for club sports and intramural events, and health and wellness programs for students. To learn more about University Recreation, visit www.liu.edu/university-recreation.

Student Code of Conduct

Long Island University students are expected to abide by the five principles of the Student Code of Conduct: respect for oneself, respect for others, respect for property, respect for authority, and honesty. Students who violate the policies of Long Island University may be subject to appropriate disciplinary action.

Student Affairs, through designated hearing officers, oversees the enforcement of the Student Code of Conduct. The University recognizes that disciplinary jurisdiction may extend to off-campus activities. The University has the discretion to exercise jurisdiction over off-campus behavior if it: 1) adversely affects the health, safety, or security of any member of the University community; or 2) adversely affects the interests of the University.

In determining whether to exercise off-campus jurisdiction, the University will consider the seriousness of the alleged harm, the risk of harm involved, whether the victim(s) are members of the University community or whether the off-campus conduct is part of a series of actions which occurred both on and off campus.

Students are accountable for adhering to all regulations in the LIU Student Handbooks. As noted under item "U", 'Violation of University policies' in "Respect for Authority" below, students must understand that they are subject to "all policies communicated elsewhere in this Handbook, University publications, verbal directives by University officials or as posted by any department."

Students enrolled in specific schools or colleges may be subject to the code of conduct established within that school or college and as overseen by the academic dean or an applicable accreditation body. If there is a conflict the more restrictive code applies.

To read the full Student Code of Conduct, please see the LIU Student Handbook or visit www.liu.edu/policy.

FACILITIES

Career Bar

Located on the third floor of Library Learning Center, the Career Bar offers a central location for students to access computers, print, and study. The Career Bar serves as the host for many Career Success workshops and events throughout the academic year.

Dining and Food Service

Aramark is the official food service and dining provider for Long Island University. Foodservice is provided at several locations throughout the campus. Food may be purchased using meal plans, credit cards, or cash.

To view food options, locations, and hours of operations, students should visit, https://liu.campusdish.com/

Downtown Brooklyn Speech-Language Hearing Clinic

The Downtown Brooklyn Speech-Language-Hearing Clinic, located in the Fort Greene/Downtown Brooklyn community, is a vital part LIU-Brooklyn's graduate program in Communication Sciences and Disorders. Our state-of-the-art center employs speech-language pathologists who serve as clinical faculty and supervisors to our graduate interns. The clinical staff is licensed by the NY State Office of the Professions and certified by the American Speech-Language-Hearing Association (ASHA) and the New York State Department of Education. The graduate program is accredited by the Council on Academic Accreditation of ASHA.

If you believe that you, or someone you know, has a speech-language, swallowing, or hearing problem, **call us at 718-488-3480.** Our fees for services are affordable. We also have a reduced fee schedule, if needed, and offer a friend and family rate for LIU Brooklyn students and staff.

Esports Arena

The Esports Arena is a state-of-the-art facility that houses the University's Division I Esports program. The arena, located in Conolly Hall, has been recognized as one of the top facilities in the region. The 5,600 square foot venue is equipped with over 50 computer stations, large-screen viewing televisions, gaming stations, and custom game-day lighting.

Kumble Theater for the Performing Arts

Kumble Theater for the Performing Arts at LIU Brooklyn is a dynamic, state-of-the-art performance venue serving one of the most diverse campuses and communities in the country. It is designed to nourish artistic exploration and development by students and other emerging artists while providing the entire community with greater access to an exciting range of quality classical and cutting-edge professional performances from around the world.

Impeccably crafted for the dramatic and technical demands of dance, music, and theatrical productions, this elegant, 320-seat theater provides finely tuned acoustics and top-tier lighting, projection, and other electronic capabilities. With a stage featuring a "sprung" floor extending to the seating area, the theater fosters intimacy between performers and their audiences.

This extraordinary theater was made possible through the generosity of former LIU Trustee Steven J. Kumble. It is part of an ambitious campus renovation that created an extensive performing arts complex also featuring a black box theater, dance studios, and a glass-enclosed art gallery. Among other major supporters of the performing arts complex is the EAB/Citigroup Foundation, through former LIU Board of Trustees Chair Edward Travaglianti, LIU trustee emeritus Donald H. Elliott, former LIU trustee Bruce C. Ratner, the City of New York, and the Independence Community Foundation.

Psychological Services Center

At our Psychological Services Center, free and confidential personal counseling is offered to students by supervised doctoral candidates in clinical psychology. Students experiencing stress in relation to academic, social or family situations, or students who simply feel they are not living up to their full potential for various reasons may benefit from speaking to someone at the center. Whether stress is interfering with a student's ability to do their best at school or is affecting the student's family or social life, talking can help. No one in or outside the university knows who comes to the center, except in the rare case of danger to self or others.

The Psychological Services Center is located on the fifth floor of the Pratt Building, Room 510. Please call 718-488-1266 to make an appointment.

Wellness, Recreational & Athletic Center (WRAC)

This 112,000 square foot facility supports LIU's Division I athletic teams, provides a state-of-the-art workout facility and swimming pool for the campus community, and offers a broad array of health and wellness services to our students, faculty, and administrators, as well as the members of the Brooklyn community at large.

Steinberg Wellness Center (previously called Wellness, Recreational & Athletic Center {WRAC}) features a 2,500 seat arena, which hosts the campus' Division I basketball and volleyball games, high school athletic events, and a variety of other special events. The fitness center includes state-of-the-art cardio and strength equipment, and a group exercise studio that includes free classes such as Pilates, yoga, hip hop dance, total body conditioning, Salsa, Zumba and abs-workout classes. The facility also includes a 25-yard, eight-lane swimming pool, and a rooftop track and tennis courts.

Steinberg Wellness Center encompasses the Health and Wellness Institute which provides activities and programs that promote good health and wellness behaviors that reduce health disparities and improve the quality of life for members of the campus community and the community at large. The Health and Wellness Institute houses one of New York City's only state-of-the-art HydroWorx 2000 therapeutic pool, which includes an elevating floor to allow for easy access and varying water levels, an underwater treadmill with speeds up to 8.5 mph, an underwater video camera and viewing monitors, body weight-support harness system, adjustable temperature control, and jets that propel water and can be used to resist movement and to challenge a person's balance.

Student-Run Businesses

LIU students learn what it takes to run a business by running a business. Students are involved in every facet of operations, from product selection and marketing to sales management and bookkeeping. Profits from LIU's student-run businesses support student scholarships, along with new business initiatives to create real-world business experiences for more students.

Browse

Browse offers a selection of popular technology brands and products, and is an authorized Apple campus store, Dell University store, and recently, a Microsoft Surface education store. Students will find all the tools they need to power their LIU Brooklyn experience from tablets and notebooks to all-in-one desktop computers and gaming consoles, as well as accessories. Students will benefit from the IT help desk, which they can use as a resource for technological needs and questions. In addition, students working in the store will gain expertise as they work alongside certified Apple service help desk technicians.

Special discounts are available for LIU community

members for personal purchases or gifts.

Canteen

Canteen is the official spirit store of the Roc Nation School of Music, Sports, and Entertainment. Canteen sells Roc Nation school and Shark Nation apparel, gifts, and items to students and community members. All proceeds from canteen store sales benefit Roc Nation Hope Scholars. The Roc Nation Hope Scholarship program provides tuition to 25% of enrolled students at the Roc Nation School of Music, Sports & Entertainment. Roc Nation School students work in canteen allowing them to earn work-study funds for their education.

Trading Floor

Featuring Bloomberg Terminals, the global benchmark for financial data and analysis, the Trading Floor gives students the tools to analyze financial markets, assess economic scenarios and interpret the key news developments that impact the global economy. All students in the school are encouraged to get Bloomberg Certified, a credential that can give them an advantage in the competitive job market.

STUDENT SERVICES AND RESOURCES

LIU offers a variety of support services to aid students in achieving their personal and professional goals and making the most of their educational experience. This includes programs designed to serve a diverse variety of students at various stages of their development and address a broad range of individual needs and challenges. The Center for Student Success and Coaching works with all students at LIU from first-year to graduate student populations. Our Success Coaches help retain students by providing guidance and support through graduation.

Using the My LIU portal at https://my.liu.edu, you can view your financial aid status and account activity, make online payments, schedule appointments with Success Coaches or Enrollment Services Coaches, and view "to do" items and "holds" that need to be resolved to continue the enrollment process. Additionally, LIU Promise Success Coaches and Enrollment Services Coaches will provide both you and your family continuous support and service throughout your time as an LIU student.

Division of Student Affairs

The Division of Student Affairs is a collaborative and innovative division dedicated to providing a highly individualized holistic student support and education that fosters student success, retention, and persistence; cultivates a community of belonging; encourages life-long learning; and develops global citizenship and future leaders.

The Division is comprised of several student support services including: The Center for Student Success and Coaching, the Learning Center, and the Center for Healthy Living. In addition, Student Affairs supports several programs including International Student Services and the Student Veteran Resources Center. The Division is led by the Assistant Vice President and Executive Dean of Students.

Student Success

The Center for Student Success & Coaching is our commitment to every student. As an LIU student, your success coach will serve as a mentor and resource for every aspect of your college experience. Whether it is creating an academic success plan, exploring financial aid opportunities, getting involved on campus or preparing for your career, your Success Coach has you covered. Guided by the Student Success Milestones, you will work closely with your success coach during your LIU journey to ensure your success.

The Learning Center

The Learning Center at Long Island University provides students with support services, strategies, information, and opportunities to help them achieve their personal, academic, and career goals through its individualized programs: Writing Program, Peer-Tutoring, Academic Success Workshops, and Disability Support Services. Please visit https://liu.edu/student-success/learning-center or call 718-488-1095.

Tutoring Program
The Tutoring Program provides trained, qualified peer tutors, to work with students in need of academic assistance. Tutoring is available free of charge both individually and in small groups. The LIU Tutoring Program is internationally certified by the College Reading and Learning Association. The tutoring schedule is disseminated at the beginning of each academic semester.

Writing Program
Writing is a powerful tool not only for communicating existing ideas but also for discovering new ones. The Writing Program is staffed by trained undergraduate and graduate students who work collaboratively with LIU students on a one-to-one basis to help them develop the strongest texts possible. Students come to the Learning Center because all writers can improve their writing through feedback. The Program can help students to brainstorm, plan, edit, revise and proofread their texts. Tutors work with students at all stages of the writing process: understanding an assignment, drafting an essay, learning more effective reading strategies, developing and supporting arguments, and learning how to proofread and edit papers.

Disability Support Services

Disability Support Services (DSS)
Disability Support Services, housed in the Learning Center, provides advocacy and coordination services at no charge to students with all types of disabilities including physical, neurological, emotional, social, specific learning disability, attention deficit disorder, and students with temporary impairments. Students are assisted in arranging reasonable accommodations as mandated by federal/state laws, Section 504 of the Rehabilitation Act, and the Americans with Disabilities Act As Amended (ADAAA).

Policy for Students with Disabilities
In compliance with federal and state laws, LIU is committed to providing qualified individuals with disabilities the opportunity to participate in all university programs and activities, curricular and extracurricular, which are available to non-disabled individuals.

Students with disabilities who desire accommodations must submit appropriate documentation of their disability to the office of Disability Support Services (DSS) located in the Learning Center. Professional staff will review and evaluate this documentation, interview the student, and provide the student with completed accommodations forms for presentation to the teaching faculty. Campus departments will be notified, as necessary, of the need for additional accommodations noted in the student's documentation. Accommodations forms must be obtained each semester before the semester begins. All disability-related files are confidential.

Accommodations
Academic accommodations are provided to students with disabilities by their individual professors within the academic departments. Accommodations will be made by other campus departments as required for non-academic matters. Accommodations will be considered reasonable when they do not fundamentally alter the nature of a program, course, or service or present an undue administrative burden on the university. Students requesting accommodations are required to submit documentation to verify eligibility under the Americans with Disabilities Act, As Amended, and Section 504 of the Rehabilitation Act of 1973. Appropriate documentation of the disability must be provided so that DSS can: 1) determine the student's eligibility for accommodation; and 2) if the student is eligible, evaluate appropriate academic and/or non-academic accommodations. Disability documentation must include a written evaluation from a physician, psychologist, or other qualified specialists that establish the nature and extent of the disability and includes the basis for the diagnosis and the dates of testing. The documentation must establish the current need for accommodation.

Determining Eligibility
Accommodations are determined on a case-by-case basis, taking into account the needs of the student, and the course standards. The determination of appropriate and reasonable accommodation is based on approved documentation and through interaction with the student. Specifically, accommodations are determined by the Learning Center in consultation with the student and with input from the faculty and staff, as needed.

In reviewing the specific accommodation requested by the student or recommended by the physician/evaluator, DSS may find that while a recommendation is clinically supported, it may not the most appropriate accommodation. In addition, Disability Support Services may propose clinically supported accommodations that would be appropriate and useful for the student, but which neither the student nor the evaluator has requested.

Denial of Accommodations
The University reserves the right to deny services

or accommodations in the event the request is not clinically supported. If the documentation provided by a student does not support the existence of a disability or the need for a requested accommodation, the student will be so advised. Students will be given the opportunity to supplement the initial documentation with further information from a physician, psychologist, or other specialists.

The University is not required to provide an accommodation that compromises the essential requirements of a course or program, that is unreasonable, or that poses a direct threat to the health or safety of the student or others.

Student Appeal

A student who disagrees with the Learning Center determination of eligibility or accommodation is encouraged to meet with an administrator to resolve the matter informally. Students may appeal the denial of the DSS determination to the dean of students.

Student Veterans Resource Center

Long Island University has a proud and distinguished history of serving its nation's military veterans, active duty service members, and their families. The Long Island University Student Veterans Resource Center (SVRC) provides the resources that veterans need to pursue their education while balancing the demands of life both inside and outside the classroom.

For additional information and resources for veterans, please visit the Student Veterans Resource Center (SVRC) in S-235. The Veterans School Certifying Official can be reached at 718-488-1200 or by email at veteran@liu.edu. For more information, visit https://liu.edu/student-success/learning-center/veteranservices.

Career Success

Preparation for jobs and internships begins as soon as a student starts at the University. Students will work with their success coach to build their resume, practice job, and interview skills, and apply for various opportunities. The Center for Student Success and Coaching holds dozens of career-related workshops each semester and hosts Career Weeks that provide individual appointments with coaches to review resumes, cover letters, and Linkedin Profiles.

As part of student success coaching, students will complete the following with their coach:

- Explore majors and career options
- Plan your curriculum
- Prepare for the job search
- Write résumés and cover letters
- Identify internships and jobs in your field
- Build a network and find mentors
- Research and apply for graduate school

Handshake

Students are encouraged to utilize Handshake, the University's job and internship portal. Students have access to thousands of positions, can upload their resumes, and begin their career search while at LIU. Each student automatically has an account and can log in using their MyLIU credentials.

Big Interview

The University's Big Interview platform provides students with the tools to conduct video interviewing to prepare for jobs and internships. Big Interview introduces students to essential life skills needed to excel in the interview process including, communication skills, self-confidence, negotiation, and other vital workplace-readiness competencies.

To access all Career Success resources, visit liu.edu/career-success.

English Language Institute

The English Language Institute offers both intensive and part-time English language programs for international students, visitors and tourists, immigrants, and refugees who wish to improve their English language skills. Classes include Conversation and Listening, Grammar, Reading and Vocabulary, and Writing. Full- and part-time exam preparation courses for the TOEFL (Test of English as a Foreign Language) and IELTS (International English Language Testing System) are also offered, as well as elective classes in Pronunciation Practice, Job Preparation, and Idiomatic Expressions and Phrasal Verbs, among others. Half-Semester, Quarter-Semester, and University Preparation programs are also available, as well as classes for Au Pairs. Classes are taught mornings, afternoons, and evenings, Monday-Thursday, throughout the year; F-1 (student) visas and financial aid are available for qualified students. The English Language Institute is located in the Library Learning Center, 4th Floor.

International Student Services

The University is home to international students from countries around the globe. Student Affairs is committed to providing a supportive and exceptional student experience for all international students. International Student Services, housed within The Center for Student Success and Coaching, coordinates international student orientation, programming, and resources. The Primary Designated School Official (PDSO) and Designated School Officials (DSOs) work with each international student on all immigration and related matters during their time enrolled as a student. These staff members are also a source of reference for international students on F-1, M-1, and J-1 visas.

To view a copy of the International Student Handbook for information on maintaining F-1 Visa status, visit liu.edu/student-success.

Bookstore

The Official Bookstore of Long Island University is powered by Barnes and Noble. The University Bookstore is located online where students can conveniently purchase or rent their textbooks. Textbook requirements can be viewed via the online ordering system. Students may choose to purchase their textbooks through this system or take the International Standard Book Number (ISBN) and purchase their books from a different vendor.

Visit the bookstore at: https://bncvirtual.com/liu

Public Safety

Emergencies: 718-488-1078

Non-Emergencies: 718-488-1078

The Department of Public Safety at LIU Brooklyn is located at the rear of the Metcalfe building, opposite the Pharmacy building. The department has a full-time staff that consists of a director, three tour commanders, three lieutenants, three desk sergeants, 45 public safety officers, and an administrative assistant. Public safety officers are licensed by the State of New York and are trained, certified and registered pursuant to the New York State Security Guard Act of 1992. The department serves the campus 24 hours a day, 7 days a week year-round, and may be reached by dialing 1078 on campus telephones (add prefix 488 when using outside lines).

The Department of Public Safety is concerned with the welfare and safety of all members of the campus community and their guests. The activities of the Department of Public Safety are enhanced by its close relationship with the 84th and 88th Precinct, which shares the responsibility of maintaining law and order on the campus. This precinct often notifies the department of any off-campus arrest involving members of our campus community if there is a perceived threat to the welfare of the other members.

Public safety officers are not peace officers, but they do handle criminal acts and crime scenes until the police department arrives. Suspects are identified and detained for action by the arriving police personnel.

Annual Campus Security Report

In accordance with the provisions of the Jeanne Cleary Act, LIU Brooklyn's annual security report includes statistics for the previous three calendar years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by LIU Brooklyn; and on public property within, or immediately adjacent to and accessible from, the campus. The

report also includes institutional policies concerning campus security issues, such as those concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assaults, hate crimes, and other relevant matters. The Advisory Committee on Campus Safety will provide upon request all campus crime statistics as reported to the United States Department of Education.

Emergency Management

LIU Brooklyn's Department of Public Safety offers comprehensive services in emergency response and management to ensure the safety of our students, faculty and staff. Through several initiatives, the campus is prepared for a wide array of emergency situations, ensuring prompt notification and protection of the campus community whether the event is commonplace or extraordinary. In the event of an emergency, LIU Brooklyn's Emergency Notification System is enabled to instantly and simultaneously contact LIU Brooklyn students, faculty and staff via Long Island University email, Web site notifications and text messaging to those who register their cell phones with the university. Emergency building managers assist the Department of Public Safety in disseminating information in their designated building and have been trained in “Evacuation” and “Shelter-in-Place” procedures. LIU Brooklyn employs an outdoor siren warning system.

Information Technology

LIU Information Technology (LIU IT) facilitates and fosters technology innovations across the institution – moving the university ahead of the technology curve to build a competitive edge in higher education and to offer modern tools to our students, faculty, staff members and administrators.

The Office of Information Technology is responsible for managing all aspects of the university’s information technology operations, including academic and administrative systems and computing, databases, dashboards, networking, audiovisual, academic computer labs and smart classroom spaces, and video and telecommunications infrastructure that includes fiber optic and copper infrastructure throughout the buildings, firewall and security access, and wireless internet access. IT provides facilities technical support to campus residence halls, departments, and special off campus programs. IT also maintains the campus’ security camera systems, cafeteria and retail space cash registers, campus videoconferencing and campus plasma displays, electronic and web signage.

Information Technology also provides oversight for university-wide information systems, compliance, and security in accordance with policies set forth by University Counsel. Information Technology collaborates with Academic Affairs to implement a unified, comprehensive learning management system and online education initiatives. Information Technology also manages business process improvement initiatives across the university. Each residential campus has a fully staffed Information Technology help desk centralized through Browse, LIU’s technology store.

As a further extension of the university’s commitment to providing students with unique, real-world learning opportunities, LIU Information Technology recently opened the doors to Browse, LIU’s on-campus technology store, an authorized technology products retailer that offers popular technology brands and products, from tablets and notebooks to all-in-one desktop computers and gaming consoles, as well as accessories, at discounted rates for LIU faculty, students, and staff with a valid LIU ID. Students who are hired in Browse as store associates play an important role in the Browse’s day-to-day operations and gain professional skills as they work alongside certified service help desk technicians. Students can learn about retail, customer service, business management, entrepreneurship, small business operations, supply chain management, e-commerce, as well as networking and technology troubleshooting, work experience that helps students to build a professional résumé prior to graduation. Students are encouraged to come to Browse for helpdesk support issues.

Teaching & Learning Experience

My LIU

My LIU is the university’s portal which provides students with convenient access to information about their records. By logging onto https://my.liu.edu, students may view the schedule of classes, register for courses, obtain their grades, and requests transcripts. They may also view financial aid awards, billing information, make online payments, accept, and decline Federal Loans and Federal College Work Study, and make an appointment to see counselors. For more information, please visit or contact Browse, Student Helpdesk.

Student Email

Each student is assigned a university email address to use for corresponding with university faculty and staff. Students can check their email by logging into https://my.liu.edu. If students have any trouble accessing the designated My LIU account, students are encouraged to check with the helpdesk at Browse at one of our campus locations: 2nd floor Hillwood Commons at Post Campus or 3rd floor Library Learning Center in Brooklyn Campus. Additional resources are available on IT’s website: https://it.liu.edu.

Modern Classrooms

Smart classrooms across the campuses are outfitted with audiovisual equipment such as overhead projectors, smart whiteboards, monitors, video recording equipment, and data projectors that are available to students and faculty for internship projects and presentations. Additionally, cutting edge 3D simulation space is available in partnership with Dassault Systemes to provide exact digital models of human anatomy for students in LIU Health Science programs. For support in utilizing university classrooms, LIU Information Technology helpdesk is available to faculty. Faculty computers are provided and maintained by the University, with upgrades according to a 4-year replacement policy and upgrades as necessary for full-time faculty.

Computer Labs

Teaching and learning at LIU is also supported by the continual upgrade and maintenance of computing laboratories. Computer labs for students’ use are available at various locations throughout the campus. All students are required to use their LIU e-mail account for communication with faculty and staff. Students may also connect to MyLIU, the University-wide computer network, and Brightspace from dormitory rooms. Whenever necessary, students can access computer accounts, software, and the internet from personal computers and mobile devices using the University’s wireless access.

Learning Management System

LIU students and faculty utilize Brightspace learning management system for course instruction, coursework submission, and collaboration. All class materials are posted in Brightspace.

Network Services

LIU students and faculty are provided wireless connectivity to LIU’s network LIUNET allowing connectivity of personal laptop computers or mobile devices to the internet across campus residential spaces, classrooms, and facilities. The wireless network at LIU Post has continuously been upgraded and expanded throughout the campus.

IT Support

Information Technology Teaching & Learning Center (TLC)

Faculty members have a specialized resource in Information Technology’s Teaching & Learning Center. The Teaching & Learning Center locations at each campus facilitate utilization of the Brightspace learning management system along with other teaching and learning tools. The Information Technology Teaching & Learning Center (TLC), located in the B. Davis Schwartz Memorial Library at Post campus and Metcalfe Building – Room M407, has been established to assist faculty in the design, programming, and implementation of various media in coursework.

In addition, the TLC conducts year-round technology-focused workshops for faculty and staff on how to use information technology in the educational process, such as Brightspace, Teams, and Microsoft Office.

LIUIT Tutorials

Online tutorials are available 24/7 for students and faculty to access for support. For students, tutorials topics range from how to use: MyLIU, the university-wide computer network; Brightspace, the learning management system; e-mail; Career Connect, the career services management system; Google Apps; and Adobe Express. In addition, tutorials for faculty provide information about LIU's Oracle PeopleSoft Enterprise Resource Planning (ERP) system, which is used for grading, and Learning Spaces for Smart Classroom Technology. Furthermore, IT security resources are available on LIU IT's website to promote security awareness and support utilizing newly implemented security tools such as Duo, for multi-factor authentication.

Browse

Following a single one-stop shop model, Browse, LIU's technology store has recently been expanded to include helpdesk services, with students serving as the front line for service desk request handling. Browse's helpdesk, run by student store associates, offers campus community members with technology purchasing support and IT helpdesk services. Escalation to various tiers and divisions of Information Technology takes place based on the type of request being handled.

Contact Information

IT Website: http://it@liu.edu

IT Email: IT@LIU.edu

Phone: 516-299-3300/ 718-488-3300

Alumni Engagement

Long Island University has an active network of over 200,000 alumni across the globe. Find out more regarding Alumni and Employer Engagement and alumni benefits by visiting liu.edu/alumni.

POLICIES AND REGULATIONS AFFECTING STUDENTS

This section is provided for informational purposes. It should not be construed to be a comprehensive presentation of all policies and regulations that affect students of LIU Pharmacy but rather as a distillation of those policies and regulations of which every student should be aware.

Standards of Professional and Ethical Behavior

Academic Ethics

Students are expected to conduct themselves in accordance with the highest academic standards of honesty and integrity. The acts of, or the intent to engage in the acts of, cheating, plagiarism, illegitimate possession and/or disposition of examinations, and similar acts, are grounds for suspension or dismissal from the university. Students are advised that plagiarism consists of any act involving the offering of the work of someone else as the student's own, including the use of work authored by a paid or volunteer person or organization contracted by the student. Students participating in experiential courses must adhere to all rules and regulations of the specific hospital, long-term care facility, industry site, etc.

LIU Pharmacy Honor Code

I. Statement of Philosophy

As students enrolled in a professional program, pharmacy students of LIU Pharmacy represent the university, the college, and the profession of pharmacy. As such, it is imperative that students conduct themselves in a professional manner, both academically and in any other situation where they are viewed as representatives of the university, the college, and/or the profession. It is imperative that pharmacy students shall be of good moral character and recognize a responsibility to participate in activities contributing to an improved community. Pharmacy students caring for patients must not be harmful, dangerous or negligent to the welfare of the patient. Therefore, standards of professional and ethical behavior have been developed as a guide for students to prepare them to meet the standards of the profession of pharmacy.

With all professions, it is the responsibility of the individual to be aware of all applicable standards (including academic, professional, ethical, and legal) and to follow them to the best of their ability at all times. Not knowing these standards is considered to be unprofessional, and does not provide defense in the case of errors in practice or unprofessional behavior. Therefore, each pharmacy student is required to become aware of and follow these standards and adhere to the rules and regulations of the university, LIU Pharmacy, the experiential practice sites, and the profession of pharmacy. The elements of the professional commitment required of pharmacy students are outlined in the Pledge of Professionalism taken by pharmacy students, which reads as follows:

"As a student of pharmacy, I believe there is a need to build and reinforce a professional identity founded on integrity, ethical behavior, and honor. This development, a vital process in my education, will help ensure that I am true to the professional relationship I establish between myself and society as I become a member of the pharmacy community. Integrity must be an essential part of my everyday life and I must practice pharmacy with honesty and commitment to service.

To accomplish this goal of professional development, I as a student of pharmacy should:

- DEVELOP a sense of loyalty and duty to the profession of pharmacy by being a builder of community, one able and willing to contribute to the well-being of others, and one who enthusiastically accepts the responsibility and accountability for membership in the profession.
- FOSTER professional competency through life-long learning. I must strive for high ideals, teamwork, and unity within the profession in order to provide optimal patient care.
- SUPPORT my colleagues by actively encouraging personal commitment to the Oath of Maimonides and a Code of Ethics as set forth by the profession
- INCORPORATE into my life and practice, dedication to excellence. This will require an ongoing reassessment of personal and professional values.
- MAINTAIN the highest ideals and professional attributes to ensure and facilitate the covenantal relationship required of the pharmaceutical caregiver.

The profession of pharmacy is one that demands adherence to a set of rigid ethical standards. These high ideals are necessary to ensure the quality of care extended to the patients I serve. As a student of pharmacy, I believe this does not start with graduation; rather, it begins with my membership in this professional college community. Therefore, I must strive to uphold these standards as I advance toward full membership in the profession of pharmacy."

The standards of academic conduct, outlined in the sections that follow, apply not only to students enrolled in the professional program but also to students enrolled in any of LIU Pharmacy's graduate programs. As such, violations of the Honor Code by students enrolled in these programs are handled in a manner similar to that of students enrolled in the professional program.

II. Academic Integrity

Students shall deal honestly with people, including colleagues, faculty, university representatives, patients, and healthcare providers. Students are expected to demonstrate honesty and integrity throughout all aspects of their education. Specifically, students are responsible for:

- Understanding the types of conduct that are deemed unacceptable and, therefore, are prohibited by this policy.
- Refraining from committing any act of cheating, plagiarizing, facilitating academic dishonesty, abusing academic materials, stealing, professional misconduct, or similar activities.
- Maintaining a "duty to report" every instance in which students may have knowledge that academic misconduct has occurred; the student must report any infraction of the Honor Code to a faculty member or other appropriate authority (i.e., course coordinator, preceptor, etc.).

Examples of academic dishonesty include, but are not limited to, the following:

Cheating

- Use of unauthorized assistance during recitation sessions, quizzes, examinations, or pharmacy practice experiences.
- Dependence upon the aid of unauthorized sources in writing papers, solving problems, or completing other assignments.
- Acquisition or possession, without permission, of examinations or other academic material belonging to a member of the university faculty or staff.
- Multiple submission of work by a student that has been used in an identical or similar form to fulfill any academic requirement at the university or any other practice site.
- Provision of assistance to others who are participating in the behaviors or activities mentioned above.

Plagiarism/Copyright Infringement

- Paraphrasing without properly crediting the author(s) with footnotes, citations, or bibliographical reference or direct quotation of the work of others without applying quotation marks, and fully and properly crediting the author(s) with footnotes, citations, or bibliographical reference.
- Use of materials prepared in collaboration with others without release in writing from the collaborators.
- Reproduction of copyright material (e.g., textbooks, handouts, examinations) without obtaining written permission from the copyright owner.
- Web-casting/taping or emailing lectures without permission of the faculty member or instructor.

For further information about what constitutes plagiarism, the student is referred to: https://owl.english.purdue.edu/owl/section/3/33.

Other

- Falsification of signatures, transcripts, grade reports, attendance records, or other official documents
- Provision of false information regarding a missed examination or assignment
- Providing a false statement to any instructor in an attempt to gain an advantage or exceptions
- Reusing, possessing, photocopying, selling, stealing, or soliciting, in its entirety or in part, of instructor-prepared examinations, lecture materials or assignments unauthorized for release to all students

Academic Dishonesty Related to Clinical Practice

- Falsification of a patient's medical records or providing fabricated information regarding a patient's medical status or treatment presented either verbally or in writing
- Multiple submission of assignments from various practice sites

Abuse of Academic Materials

- Destroying or making inaccessible academic resource materials. Examples include, but are not limited to the following:
- Destroying, hiding, or otherwise making unavailable for common use library, computer, personal digital assistants (PDAs), or other academic reference materials
- Destroying, hiding, or otherwise making unavailable, another's notes, experiments, computer programs, or other academic work

Representation

A pharmacy student shall accurately represent himself/herself to others, including, but not limited to, colleagues, faculty and staff of the university, patients, preceptors, and other healthcare providers.

III. Professional Integrity

A student must not be harmful, dangerous, or negligent to the mental or physical health of patients, colleagues, faculty, or the public. Students must be familiar with and abide by the rules and regulations of their assigned experiential practice sites, as well as federal, state, and local laws pertaining to the practice of pharmacy.

Demeanor

The student is expected to be thoughtful and professional when interacting with faculty, patients and their families, physicians, preceptors, other students, and other members of the healthcare team. Likewise, students must be respectful of and adhere to LIU Pharmacy's rules and regulations.

Inappropriate behavior includes, but is not limited to:

- Absence from, or lateness to, required College professional activities
- Use of offensive language or gestures
- Intimidation or coercion of fellow students, faculty, staff, and patients
- Posting of offensive and/or unauthorized material on websites where the students are identified as being from LIU Pharmacy
- Defacing university property

Members of LIU Pharmacy are expected to comply with the College policies regarding food and drink in the classroom or clinical setting.

Smoking is not permitted in any part of the LIU Pharmacy indoor facilities.

Appearance

Students shall maintain a neat, clean appearance, and dress in attire that is appropriate for the setting. While in practice experiences and during official college professional events, students must be dressed in professional attire. For men, this includes a dress shirt, tie, and dress slacks or neat-appearing khaki pants. Women should be similarly appropriately and conservatively attired such as in a blouse with skirt or dress pants, or in a dress. Sneakers, open-toe shoes of any kind, work boots or shoes that look like work boots, T-shirts, shorts, and jeans of any color are examples of what is not permitted. In the classroom, students should be dressed in clothes that are clean and neat and are not considered offensive or embarrassing to the faculty or students. Additional/specific dress code requirements may be outlined in individual course syllabi.

Impairment

The student will not use alcohol or drugs in ways that impair their ability to perform required work or result in compromised patient care. When a student uses a medication that may impair their ability to care for patients, it is their responsibility to discuss this with their advisor, faculty member, or preceptor at the college or experiential practice site. Students should protect the public from an impaired colleague and assist an impaired colleague in receiving appropriate help with their drug or alcohol problem. Students must also refer to the Alcohol Policy and Regulations, detailed in the LIU Brooklyn Student Handbook.

In addition to the Honor Code, students are expected to follow the policies and procedures for criminal background check and drug screening policies for LIU Pharmacy and, when applicable, the affiliated experiential practice site.

IV. Pledge of Honor

All students are expected to sign the following Pledge of Honor upon matriculation to LIU Pharmacy:

"As a student of the Arnold & Marie Schwartz College of Pharmacy and Health Sciences of Long Island University, I will actively pursue behaviors that are consistent with professional conduct, as outlined in the college's Honor Code. I will maintain a professional relationship with faculty, colleagues, other health care providers, and patients, and will maintain academic integrity, as outlined in the Code. I fully recognize that violation of any of the standards of the Code may result in disciplinary actions, including possible dismissal from the college."

Students are reminded that failure to sign this document does not relieve them from the professional and academic responsibilities set forth in the LIU Pharmacy Honor Code and/or other documents delineating student conduct and behavior.

LIU Pharmacy Violations of Standards of Professional and Ethical Behavior and Academic Integrity

Students in the Pharm.D. program accused of violating the college's standards of professional and ethical behavior and academic integrity may be subject to disciplinary action. Disciplinary actions may include suspension or dismissal from LIU Pharmacy or specific forms of remediation, such as completion of a course on ethics, service requirements to the college, or other not-for-profit or charitable organizations or agencies as the college may specify. A Committee on Professional Conduct, Discipline, and Grievances consisting of members of the faculty and student representation will be convened to hear the accusations and hear defense on the part of the Pharm.D. student. All parties involved may request the presence of other individuals with knowledge pertinent to the case to present evidence. The Committee on Professional Conduct, Discipline, and Grievances will present its finding of fact and recommendations as to the disposition of the case to the Assistant Dean of Student Academic and Professional Affairs. Students are advised that they may request the presence of counsel for said hearings only for purposes of observation and advisement. Counsel is not allowed to question those appearing before the committee or to advocate on behalf of the student. Decisions of the Committee on Professional Conduct, Discipline, and Grievances and/or the Assistant Dean for Student Academic and Professional Affairs that the student believes may demonstrate arbitrary and capricious treatment or to be fundamentally unfair may be appealed, as a final step, to the Council of Deans of LIU Pharmacy. Students that receive a failing grade due to Disciplinary Action, will not be allowed to remediate the course.

LIU Pharmacy Grievance and Disciplinary Procedure

Students at LIU Pharmacy may expect scrupulous regard for their rights as students and individuals and should expect to be treated fairly and with courtesy by all members of the academic community. In any matter in which students feel that their rights have been violated, or in matters of serious dispute with members of the administration or faculty, students may avail themselves of the following formal grievance procedure:

1. The student will write out a clear statement of the grievance.
2. The student may submit this statement to the staff member involved. The student will be given a written response within a reasonable time.
3. If the student is not satisfied with the response, or initially, if preferred, the student may submit a statement to the appropriate department head. The department head will review the matter and provide the student with a written response within a reasonable time.
4. After a student receives a response from the department head, the disciplinary committee may be convened upon the request of the student, the faculty member, or the administration. This committee advises either the Assistant Dean for Student Academic and Professional Affairs regarding the matter; the dean's decision is then communicated to the concerned parties. The appropriate dean may initiate disciplinary proceedings upon request of a faculty member or department head.
5. If still not satisfied, the student may institute a formal complaint with the Dean of the college in which he or she is enrolled. The Dean will review the matter, hear the student and the chair of the committee, and see that the proper action is taken.

This procedure shall be a formal grievance procedure for the resolution of all student grievances and disciplinary matters, including those alleging actions prohibited by legislation.

Policy for Student Complaints Relating to Accreditation Council for Pharmacy Education (ACPE) Standards, Policies and Procedures

ACPE is required to demonstrate to the U.S. Secretary of Education its expectations regarding a program's recording and handling of student complaints. In addition, ACPE must demonstrate a link between its review of complaints and its evaluation of a program in the accreditation process. Therefore, ACPE has adopted the following policy: "The colleges and schools of pharmacy have an obligation to respond to any written complaints by students lodged against the college or school of pharmacy or the pharmacy program that is related to the standards and the policies and procedures of ACPE. The college or school of pharmacy shall establish, implement and maintain a student complaint procedure that affords the complainant fundamental procedural due process. The college or school of pharmacy should communicate the complaint policy to students. The college or school of pharmacy, or the pharmacy program, shall maintain a file that contains the written complaint, a written record of each step of the complaint procedure, and the outcome, except as otherwise prohibited by state or federal law. The files shall be made available for inspection to ACPE at on-site evaluations, or otherwise at ACPE's written request. The findings of this inspection, and the resulting implication(s) to the accreditation of the professional program, shall be noted in the Evaluation Team Report." In order to comply with the ACPE policy regarding student complaints relating to ACPE standards, policies, and procedures, the policy of LIU Pharmacy is to provide:

1. Student access to ACPE standards, policies, and procedures
2. Communication of complaint policy to students
3. Procedure for student complaints

Student Access, Posting, and Communication of Policy

A copy of ACPE standards, policies, and procedures and a copy of the LIU Pharmacy policy relating to this issue are available in the Office of the Dean. It is available for review by any student enrolled in LIU Pharmacy, but may not be removed from the Office of the Dean.

A copy of ACPE standards, policies, and procedures is also available on the ACPE website, www.acpe-accredit.org. The following shall serve as the notification to students of the complaint policy and the procedure for student complaints:

Complaint Policy and Procedure for Student Complaints

The grievance procedure for students shall require a formal written complaint describing the specific violation of ACPE standards, policies, or procedures. The written complaint should include a description of the ACPE standard, policy, or procedure in question; grounds for appeal; a summary of the argument; and supporting evidence. This shall be delivered to the Office of the Dean of LIU Pharmacy. Upon receipt of a written complaint, an ACPE Grievance Committee shall be convened to review the complaint. A formal, written reply to the student(s) from the Grievance Committee shall include an evaluation of the complaint, a description of any violations, and a proposal for any necessary corrective action. This process shall usually take no longer than 90 days. Decisions of the Grievance Committee that demonstrate arbitrary and capricious treatment or are fundamentally unfair may be appealed, as a final step, to the Dean of LIU Pharmacy. This process is the sole avenue for student complaints regarding ACPE standards, policies, and procedures.

A record containing student complaints and written records of the complaint procedure and outcomes shall be maintained in the Office of the Dean of LIU Pharmacy, and shall be available for review by ACPE or its representatives upon written request or in the process of an on-site evaluation visit.

LIU Pharmacy Official Correspondence

Every student is required to report his or her correct residential address to the LIU Brooklyn Office of Enrollment Services. This address must be the student's actual residing address while in attendance at LIU Pharmacy. Reporting the parent's address is not acceptable unless the student is currently in residence with the parent. Address changes should be submitted to the Office of Enrollment Services within three days of a change of residence.

Official correspondence from LIU Pharmacy that is intended for delivery by the United States Postal System by first class, third class, or other classes of mail will be mailed to the address the student lists with the Office of Enrollment Services.

Official correspondence from the college is also regularly sent to students by electronic mail. Every student of LIU Pharmacy is considered to be on notice of the information contained in email messages sent by the college to the student's official email address. All students of LIU Pharmacy are assigned an official LIU email alias (typically firstname.lastname@my.liu.edu) that serves as the official LIU email address. Official email correspondence from LIU Pharmacy is sent to that address.

LIU Pharmacy Picture Student Identification

All students of LIU Pharmacy are expected to obtain a mobile LIU Brooklyn student identification card that bears their individual photograph. In addition to other uses on campus, students in the college are expected to present this form of identification at the start of most examinations administered by the college.

TUITION AND FEES

Students are billed for tuition and fees at the time of registration. Room and board charges are reflected at the time of room assignment. Students must make satisfactory payment arrangements before the start of each term or before moving into residence halls to remain in good financial standing.

Acceptable payment arrangements include:

- Payment in full using check or credit card;
- Approved financial aid covering all charges;
- Enrollment in an online University Payment Plan; and/or
- Participation in an approved third-party payment agreement.

A student who complies with any combination of the above shall be considered in good financial standing, so long as all conditions are met throughout the term. All payment arrangements must be completely satisfied or late payment fees and/or penalties will be applied to your account. Students who fail to make satisfactory payment arrangements on delinquent past-due balances may be referred to an outside collection agency or attorney, where additional fees and penalties may be charged to their account (up to 30 percent of unpaid charges), including reasonable attorney's fees, as permitted by applicable law. Accounts referred to outside collection agencies may also be reported to one or more of the national credit bureaus. All policies can be found online at **www.liu.edu/enrollment-services**.

Tuition and Fee Schedule

Application Fee (non-refundable)	$ 50
Tuition Deposit (PharmD), non-refundable	500
Tuition Deposit (Master's & PhD programs), non-refundable	200
Pharm.D. Tuition:	
• Years 1-2, 12-18 credits, per term	20,937
• Years 1-2, per credit (less than 12 credits)	1,307
• Years 3-5, 12-19 credits, per term	24,755
• Years 3-5, per credit (less than 12 credits)	1,549
• Year 6, per credit (Summer, Fall, Spring)	1,391
• PHM 1	275
• Community IPPE (PHM 400) and Institutional Practice IPPE (PHM 500), per term	1,665
• Master's Degree and Graduate Studies, per credit	1,663
• Pharmacy, PhD, per credit	1,695
• Professional Fee, per term	50
• Malpractice Insurance Fee, per term (years 3-6)	30
University Fee:	
• 12+ credits, per term	1,058
• Less than 12 credits, per term	529
Other Required Fees:	
• University Dining Dollars, 9+ credits, per term	75
Other Fees:	
• Maintenance of Matriculation Fee - Professional & Master's	100
• Maintenance of Matriculation Fee - PhD	250
• Late Payment Fee	350
• Returned Check/Credit Card Chargeback Fee	25
• Replacement Student ID Card	25
• Diploma Replacement Fee	40
• Official Transcript, on-demand, per request	25
• Official Transcript, online, per request	15

Note: Students enrolled prior to the 2023-2024 academic year are not subject to credit limits

Housing and Meal Plan Schedule

Fall/Spring Accommodations (per term)	
Housing Deposit (non-refundable)	$ 300
Conolly Hall:	
Standard Single	10,624
Standard Double	6,192
Suite Double	6,323
Suite Quad	6,617
Apartment Double	8,442
Apartment Quad	7,938
490 Fulton Street:	
3-4 Bedroom Apartment	13,490
5-6 Bedroom Apartment	9,023
Intersession Rate:	
Per week	392
Summer Accommodations (per session)	
Conolly Hall:	
Standard Single	4,251
Standard Double	2,496
Suite Double	2,531
Suite Quad	2,648
Apartment Double	3,378
Apartment Quad	3,177
490 Fulton Street:	
3-4 Bedroom Apartment	5,398
5-6 Bedroom Apartment	2,822
Fall/Spring Meal Plans (per term)	
Residential Meal Plan 1 (unlimited meals plus $300 dining dollars)	3,277
Residential Meal Plan 2 (14 meals per week plus $300 dining dollars)	3,006
Residential Meal Plan 3 (10 meals per week plus $300 dining dollars)	2,723
Residential Dining Dollars	300
Dining Dollars+ Plan ($200 additional dining dollars)	200
Commuter Meal Plan 1 (25 meals plus $50 dining dollars)	292
Commuter Meal Plan 2 (50 meals plus $50 dining dollars)	466

All resident students are required to participate in a meal plan. The Residential Dining Dollars plan is only available to residents in apartments with kitchens. Dining dollars can be used at the point of sale locations across the campus.

Payment Plans

Payment Plans

The University offers students and families the ability to pay your tuition bill in installments using our online payment plan system. These plans can help families budget the cost of tuition and fees by spreading out the cost over a number of payments each term. Enrolling in a payment plan is easy - simply log into the LIU Payment Gateway, enroll in a plan, and make the necessary down payment. You can pay online using a credit card or e-check, knowing your information is secured by industry-leading security features. The payment plan system will automatically notify you if your installments increase or decrease due to changes in your student account.

The University offers the following payment plans each semester:

Enrollment Fee	$35
Enrollment Dates	Fall : July - November (Last month/day to enroll is October 15th) Spring : December - April (Last month/day to enroll is March 15th) Summer : May - June (Must sign up in May for the two month summer payment option)
Balance Calculation	All applicable charges, less any approved financial aid. Your plan will automatically recalculate if changes are made to your student account.
Payment Structure	The payment structure will be equal installments based on the enrollment date of the plan. For example, if you sign up for the Fall payment plan in August you will have 4 payments not five.
Down Payment	20%-50% (depending on date of enrollment).
Late Payment Fee	$25 if payment is not received within 10 days of the scheduled due date.
Payment Methods	Mastercard, Visa, American Express, Discover, or ACH; auto deduction options are also available.
How to Enroll	Log into your MyLIU account and select "Make a Payment." Then log into the LIU Payment Gateway and select "Payment Plans."
Authorized User Access	Yes. You must first set up an authorized user using their email account. You may have more than one authorized user.

Financial Policies

Payment Due Dates

Term	Bill Available	Bill Due Date
Fall	July 1	August 15
Winter	November 1	December 1
Spring	November 15	January 1
Summer	May 1	June 15

Student Bills are subject to change based on modifications made to courses, credit loads, housing, and meal plans. In addition, additional fees or fines may occasionally alter the bill. Anticipated aid and financial aid credits will be visible on a student's account but are not applied until all requirements have been completed. Financial aid is based on full-time enrollment. Students may view their anticipated financial aid student account, and make payments via their MyLIU. Visit www.MyLIU.edu to log in. Click on Make an E-Payment and login using your MyLIU credentials to utilize our secure online payment gateway that allows students to make a deposit, pay a bill, generate an On-Demand statement or 1098T form or set up a payment plan.

Late Payment Assessment

Fall Term	Amount
After Spring registration opens	$350
Winter Term	
1st Day	$150
Spring Term	
After Fall registration opens	$350
Summer Term	
July 15	$150

Residence Hall Cancellation

The $300.00 housing deposit required to reserve campus housing is non-refundable. Once a student has signed a housing contract, the contract is for the entire academic year. This agreement may be canceled by submitting the Housing Cancellation Form. If a housing contract is canceled, the student will be subject to charges as indicated below. These charges apply to all students, including those who cancel due to leave of absence or withdrawal.

Cancellations for any reason after taking occupancy must be submitted via the Housing Cancellation Form. The effective date of a student's cancellation is the date on which the student has completed all of the following requirements:

- Submits the Housing Cancellation Form
- Vacates and removes all personal belongings from their assigned room; and,
- Properly checks out with residence hall staff, i.e., confirms that space has been vacated, belongings have been removed, and a damages inventory has been completed with residence hall staff.

The housing cancellation will not be considered effective until all three above conditions are met.

Students are entitled to a one-week grace period from the first day of classes before they are fully liable for all room charges. After one week has passed from the first day of classes, students are not eligible for a room refund. Meal plans are not eligible for a refund once the semester begins.

A refund during the first week of classes will only be initiated upon completion of the cancellation process described above. Refunds are issued to a student's Student Financial account and are first applied to any outstanding balance before being credited back to the student.

Students who are restricted from the residence halls or removed from housing due to violations of the Student Code of Conduct or other policies of Long Island University are not eligible for a residence hall refund.

The University reserves the right to terminate the housing contract and repossess the room(s) for failure to pay University fees, violation of University or residence policy, or when notified by the school that a resident has taken a leave of absence or has withdrawn from the University.

Student Billing and Collection Policy

The University takes all necessary and reasonable collection efforts to ensure that outstanding and overdue accounts are accurate and paid in accordance with the following:

- The University deals with all students in a fair and equitable manner and will be professional and accountable in all interactions with our students.
- The University is consistent in its billing and collections actions and the application of University payment policies. The process for the collection of outstanding accounts is standardized and comprised of a series of e-mails, notices, and telephone calls informing students of the status of their accounts.
- Under New York State Law S.5924-C/A.6938-B, the University may not withhold official transcripts from students.
- The University may withhold diplomas or may not allow future registration for students with outstanding accounts receivable.
- The University works with students to resolve all outstanding bills and makes efforts to keep collections in-house.
- The University places difficult to collect accounts with external licensed collection agencies, all of whom are reputable and respectful of applicable legislation, codes of conducts and the privacy of information. Accounts are sent to collections only after all other efforts have been exhausted and the student is no longer in attendance.

The Office of Student Financial Services assumes the following roles and responsibilities with regard to this policy:

- establishes a collection policy and the escalating nature of the collection process.
- clearly articulates and publishes the collections policy on the University's web site and in student publications and guides so that students and families are informed of the repercussions of non-payment.
- ensures that oversight and monitoring of external collection agency relationships exist and are maintained.
- ensures that collection agency staff do not gather, retain or disclose information about any student in contravention of any federal, state, or local laws or statutes.
- tenders new collection agency services through a competitive bidding process. New placements to collection agencies are based solely upon the successful recovery of outstanding amounts due.

The Office of Enrollment Services assumes the following roles and responsibilities with regard to this policy:

- ensures established protocol and standardized business processes are in place for the collection of outstanding overdue amounts and that all collection activities are undertaken within an approved collection business processes, guidelines and accepted code of ethics.
- ensures all efforts to collect overdue accounts have taken place before an account is placed with an external collection agency.

- identifies accounts that should be managed in house and not be placed with external agencies.

Students who have previously filed bankruptcy or have a current open bankruptcy claim are covered by the period of automatic stay. Students who have an open bankruptcy claim or who have previously had debt forgiven by Long Island University through bankruptcy (any chapter), will have full access to records and may register for future semesters. However, all payments must be made prior to the registration of the semester for which they are enrolling, or students must have completed their financial aid packet and have funds awarded by the payment deadline. If financial aid does not cover the entire semester enrolled, students must pay in full the remaining balance by the payment deadline.

Student Health Insurance

Long Island University requires all clinical, intercollegiate athletes, and international students to maintain health insurance. The University sponsors a Student Health Insurance Plan with below-market rates that provides students with health coverage at school, at their permanent residence, and while traveling or studying abroad. The plan is fully compliant with the Affordable Care Act and provides students access to a network of doctors, hospitals, and pharmacies. All eligible students are automatically enrolled in the University-sponsored Plan, but may waive their participation by providing evidence of coverage under a family plan or other policy that meets or exceeds coverage set forth in the University-sponsored Plan.
Additional information regarding LIU's Student Health Insurance Plan can be found on the University's website: https://liu.edu/enrollment-services/tuition-fees/student-health-insurance

Third Party Payment Policy

The University allows third-party bill clearance to accommodate delays in receiving payments or for those entities that required the submission of completed grades for the term prior to the release of funds. In order for the University to recognize an anticipated third-party payment for a student's tuition, fees and/or other charges, written authorization is required on corporate letterhead. All letters are subject to review by the Office of Enrollment Services and must include the following information:

- Student name
- Student ID and/or social security number
- Term or academic year covered
- Number of credits or coursework covered
- Dollar or percentage limit of total charges (if applicable)
- Sponsoring company's name, billing address, contact name, telephone number and e-mail address.

Students must submit the written authorization described above in person to the Office of Enrollment Services, along with a completed Third-Party Payment Form and payment for any remaining balance.

The University will place a student in good financial standing for the term if the student presents written authorization from a third party or sponsoring company that intends to make payment on their behalf.

Tuition and Fees Liability and Refund Policy

By registering for courses at LIU, a student enters into a legally-binding contract to pay all tuition and fees, including any non-refundable fees. A refund of tuition depends on when a student drops classes and whether the student adds other classes. Whether a student withdraws from a single course or withdraws from the University completely, refunds are directly tied to the University Academic Calendar as published on the LIU website.

To be eligible for a refund of tuition, program fees, and mandatory fees, students must drop courses by the specified refund dates published for each semester in the Academic Calendar. Sessions with beginning or ending dates different from the standard term schedule will have refund schedules specific to each session. Class start and end dates will identify the proper refund calendar to follow.

Tuition liability is the amount of money a student owes the University for tuition, fees, room, board, and miscellaneous charges based on the student's expected presence or participation in University activities. The following criteria apply to tuition liability:

- Zero liability results when a student properly drops or officially withdraws from classes in accordance with University policy prior to the start of the term or during the drop/add period. During zero liability, refunds will be processed and charges removed for tuition and all fees.
- Partial liability results when a student properly drops or officially withdraws from classes after the drop/add period. The amount due to the University will be prorated according to the published session liability schedule, and partial refunds will be processed.
- 100 percent liability results when a student is liable in full to the University for all tuition, fees, room, board, and miscellaneous charges. During 100 percent liability, no refunds will be processed and payment is due in full at the time of withdrawal.

Students are expected to pay for their classes in a timely manner, and must understand and follow the correct procedures to withdraw from classes. Non-attendance and/or non-payment do not constitute official withdrawal from the University. The calculation of tuition and fee liability, if any, is based on the date of the student's official withdrawal or drop in accordance with University's Adding or Dropping Courses Policy and Withdrawal from Courses Policy. The University offers tuition insurance for all registered students, which can be purchased directly through the University each term.

Room and board charges must be cancelled through the Office of Residence Life. Liability for these charges will be pro-rated based on occupancy dates and assessed at the time of cancellation. Student health insurance charges cannot be refunded once the policy has been utilized (e.g., a claim has been filed on behalf of the student).

The University develops and publishes tuition liability schedules by term that are clear and consistently applied.

For withdrawals during traditional fall and spring terms:

Withdrawal Date	Liability
Week 1	0%
Week 2	25%
Week 3	50%
Week 4	75%
Week 5+	100%

For withdrawals during summer and other sessions seven weeks or greater:

Withdrawal Date	Liability
Week 1	0%
Week 2	50%
Week 3+	100%

For withdrawal during summer and other sessions three to seven weeks:

Withdrawal Date	Liability
Day 1-3	0%
Day 4-5	50%
Day 6+	100%

For withdrawal during winter and other sessions two weeks or less:

Withdrawal Date	Liability

Day 1	0%
Day 2	50%
Day 3+	100%

Students requesting a review of tuition and fee liability must complete the University's Student Appeals Form in accordance with University policy and submit all required supporting documentation. Students who withdraw with liability and have purchased tuition insurance can file a claim with the University after withdrawing to recoup the insured amount.

FINANCIAL AID

Long Island University awards financial aid to help students meet the difference between their resources and the cost of education. All awards are subject to the availability of funds and the student's demonstrated need. Renewal of assistance depends on the annual reevaluation of a student's need, the availability of funds, the successful completion of the previous year, and satisfactory progress toward completion of degree requirements. In addition, students must meet the published filing deadlines. Detailed information on financial aid is forwarded with the admission application and is also available on the Enrollment Services website at www.liu.edu/enrollment-services.

University scholarships or fellowships may be granted by themselves or in conjunction with federal and/or state aid, including scholarships, loans, and work-study. To receive the maximum amount of aid, students must apply for financial aid by the appropriate deadline.

It is the student's responsibility to supply correct, accurate, and complete information and to notify immediately of any changes or corrections in their financial situation, enrollment status, or housing status, including tuition remission benefits, outside scholarships, and grants, and state-sponsored prepaid college savings plans.

Applying for Financial Aid

Students must submit the Free Application for Federal Student Aid (FAFSA), available online at studentaid.gov, which is the basic form for all student aid programs. Be sure to complete all sections. Students should give permission on the FAFSA for application data to be sent directly to Long Island University (the LIU federal school code number is 002751 and our New York state graduate code number is 5403). New students should submit the application by February 15 for the fall term or by November 1 for the spring term. Returning students should apply no later than March 1st.

To be considered for financial aid, students must be classified either as U.S. citizens or as eligible noncitizens, be officially admitted to LIU or matriculated in a degree program and be making satisfactory academic progress toward degree requirements. Students in certain advanced certificate or diploma programs may also be eligible for consideration. Generally, university-administered aid is awarded to full-time students. Part-time students may be eligible for Federal loans but must also maintain satisfactory academic progress.

TUITION SCHOLARSHIP POLICY

Long Island University offers tuition scholarships to qualified undergraduate students based on evaluation of their admissions application and credentials. These scholarships are granted upon admission and detailed in the student's admission and scholarship offer letter. Scholarship offers are contingent on the receipt and evaluation of the student's final official transcript and test scores.

Duration of Scholarship

- First-Year Students: Scholarships may be awarded for up to eight (8) consecutive semesters (fall and spring) to support the completion of the student's first undergraduate degree, provided that the renewal criteria are met by the end of each spring semester.
- Transfer Students: Scholarships may be granted for up to six (6) consecutive semesters (fall and spring) toward the completion of the student's first undergraduate degree, contingent upon meeting the renewal criteria by the end of each spring semester.

Scholarship Terms

- Renewal Requirements: To continue receiving the merit scholarship, students must:
  - Maintain the cumulative GPA requirement outlined in the scholarship award letter.
  - Be enrolled full-time at Long Island University continuously.
  - Complete the FAFSA for each academic year.
- Additional Conditions:
  - Scholarships offered during the admissions process are applied to tuition and cannot be applied to fees, room, or board.
  - Total financial aid, including scholarships from LIU, cannot exceed the cost of tuition.
  - LIU scholarships are applied to a student balance after federal and state aid has been applied.
  - Students receiving full-tuition coverage to LIU through tuition remission or tuition exchange are not eligible for tuition scholarships.
  - Students receiving athletic scholarships may not receive more than $10,000 in tuition scholarships and must adhere to the terms of their National Letter of Intent (NLI) agreement.
  - Scholarship offers are only valid for the semester in which they are awarded. If students defer their enrollment, they will be subject to the scholarship terms and amounts available for the new semester of enrollment.
  - Students are responsible for maintaining the renewal criteria and continuous enrollment. Discontinuing enrollment without an approved deferment may result in loss of the scholarship.

Tuition scholarships offered during the admissions process are final and cannot be increased over subsequent semesters. Tuition scholarships and other financial aid offers may be viewed on a student's MyLIU account. Students who have questions related to their Tuition Scholarship or financial aid may seek assistance from their assigned admissions recruiter or success coach.

Awards

UNIVERSITY-SPONSORED AND ADMINISTERED PROGRAMS

Through the generosity of its alumni and other concerned donors, as well as from funds supplied by the federal government, the University can provide an extensive financial aid program for its students. Awards are competitive and based on academic achievement, test scores, and, in most cases, financial need.

SCHOLARSHIPS AND GRANTS

Long Island University maintains an extensive program of scholarships and grants-in-aid based on academic merit and demonstrated financial need. Awards are made during the admissions process. Institutional scholarships may be combined with government-supported grants and loans into a single financial aid package. Scholarships and grants are normally applied to tuition and fees; they can range from $500 to full tuition and fees and do not require repayment.

Long Island University's scholarship programs are designed to reward students who demonstrate outstanding academic achievement. We are committed to providing you with an affordable, high-quality education. Awards are given to students who demonstrate academic achievement, athletic talent, or strong leadership as well as performers and artists. Aid is also awarded based on financial need.

PART-TIME EMPLOYMENT

Student Career & Job Portal

Many financial aid award packages include work-study. This means that students are eligible to participate in the Federal Work-Study Program and may earn up to the amount recommended in their award package. Work-study wages are paid directly to the student on a bi-weekly basis and are normally used for educational expenses. On-campus and off-campus jobs and internships are available through Handshake at http://handhshake.liu.edu. It is not necessary to be awarded work-study earnings to use Handshake.

Resident Assistantships

Resident assistants reside in the residence halls and are responsible for organizing, implementing, and evaluating social and educational activities. Compensation includes a residence hall room. The position information may be obtained from LIU Promise.

ALL OTHER SOURCES OF AID

STATE GRANTS

New York State and other states offer a variety of

grants and scholarships to residents. Although the application is made directly to the state and grants are awarded by the state, the amount each student is expected to receive is estimated and taken into account by the University when assembling the student's financial aid package. LIU's New York State school code is **0403**. For complete information, contact the New York Higher Education Services Corporation (HESC) at 888-697-4372, or visit their website at hesc.ny.gov.

New York State Tuition Assistance Program (TAP)
Legal residents of the state of New York who are enrolled in a full-time undergraduate degree program of at least 6 credits per term, or the equivalent, may be eligible for awards under this program. The award varies, depending on income and tuition cost. Students applying for TAP must do so via FAFSA (see earlier "How to Apply" section). Submit the completed application as instructed. For more information about TAP, visit hesc.ny.gov/pay-for-college/apply-for-financial-aid/nys-tap.html.

New York State Enhanced Tuition Awards (ETA)
Enhanced Tuition Awards of up to $6,000 are available for resident students enrolled in a private college in New York State. Awards will be phased in over three years, beginning for New Yorkers making up to $125,000 adjusted gross income. ETA recipients can receive up to $6,000 through a combination of their TAP award, ETA award, and a match from LIU. Students are eligible to get an award for up to four years when pursuing a bachelor's degree. Students in an undergraduate program of study normally requiring five years (HEOP) are eligible to receive the award for five years. Award recipients need to earn a passing grade to maintain their Enhanced Tuition Awards, provided they earn a total of 30 credits over the course of a year. Students with disabilities under the ADA are allowed to attend on a part-time basis and their award will be prorated.

States Other Than New York
Some students from outside New York State may qualify for funds from their own state scholarship programs that can be used at Long Island University. Contact your state financial aid agency (call the Federal Student Aid Center at 1-800-433-3243 for the address and telephone number) for program requirements and application procedures. When you receive an eligibility notice from your state program, you should submit it to Enrollment Services in advance of registration.

FEDERAL GRANTS AND BENEFITS
Pell Grant Program
The Federal Pell Grant Program assists undergraduate students who demonstrate financial need according to economic criteria and program requirements established by the federal government. To be eligible, you must enroll in a degree or approved certificate/diploma program and be matriculated for your first bachelor's degree. (You are not eligible if you have already completed a bachelor's degree.)

Federal Supplemental Educational Opportunity Grants (SEOG)
These federally funded grants are awarded to undergraduates whose financial need is substantial. All FAFSA filers who meet our published deadlines and qualify are automatically considered for this grant. However, funds for this program may be limited and are based on availability. To qualify, students are encouraged to submit their FAFSA by the University's established priority date.

Veterans Benefits
Various programs provide educational benefits for spouses, sons, and daughters of deceased or permanently disabled veterans as well as for veterans and in-service personnel who served on active duty in the United States Armed Forces after January 1, 1955. In these programs, the amount of benefits varies. Applications and further information may be obtained from the student's regional office of the Department of Veterans Affairs. The University participates in the Yellow Ribbon Program. Additional guidance may be obtained from Enrollment Services or at the US Department of Veterans Affairs website at benefits.va.gov/GIBILL

SCHOLARSHIPS AND GRANTS FROM OTHER ORGANIZATIONS
In addition to the sources of gift aid described above, students may also be eligible for a private scholarship or grant from an outside agency or organization. Some sources to explore are employers, unions, professional organizations, and community and special interest groups.

FEDERAL LOANS
Federal Direct Student Loan Program
The Federal Direct Student Loan is obtained from the U.S. Department of Education. The total amount borrowed in any year may not exceed the cost of education minus the total family contribution and all other financial aid received that year.

Federal Direct loan payments are co-payable to LIU and the student, and funds are applied first to any outstanding balance on the student's account. An origination fee will be deducted from the loan funds. Students may qualify for both subsidized and unsubsidized Direct loans. The interest on the Federal Direct Subsidized Loan is paid by the US government while the student is in school and remains enrolled at least half-time. The Federal Direct Unsubsidized Loan terms and conditions are essentially the same as the subsidized loan except the federal government does not pay the interest while the student is in school. Instead, the interest is accrued and added to the principal of the loan. Subsidized Direct loans are based strictly on financial need. During the first year of study, a student may borrow up to a total of $5,500 (combined subsidized and unsubsidized), with no more than $3,500 as the subsidized amount. In subsequent years, the total is increased to $6,500 for sophomores (with no more than $4,500 as the subsidized amount), $7,500 for juniors and seniors (with no more than $5,500 as the subsidized amount), and $20,500 unsubsidized loan for graduate students. For independent undergraduate students and some dependent undergraduate students whose parents do not qualify for a PLUS loan, the Federal Direct Unsubsidized Stafford Loan Program offers yet more borrowing eligibility.

For details about additional unsubsidized amounts available and the maximum aggregate limits for all Federal Direct loans combined, visit the US Department of Education website at studentaid.gov

Federal Direct PLUS Loan Program
The PLUS loan enables parents of dependent undergraduate students to borrow up to the full amount of an LIU education less other aid. There is no aggregate loan limit, and individual lenders will evaluate point history. PLUS loan disbursements are made payable to LIU and the parent and funds are applied first to the current term's outstanding balance on the student's account. To apply for a PLUS loan, log into studentaid.gov

PRIVATE LOANS
A private (non-federal) loan may be a financing option for students who are not eligible for federal aid or who need additional funding beyond the maximum amounts offered by federal loans. These loans are not guaranteed by the federal government. LIU urges all students and parents to research any lender they are considering for this type of funding and to specifically ask several key questions, including current interest rates; co-signer requirements; repayment options, both in school and out; and whether or not the loan may be sold to another provider. Each student has the right to select the educational loan provider of their choice. To see your choice of lenders, log onto elmselect.com

If you have considered applying for a private loan, you may be required to complete the Free Application for Federal Student Aid (FAFSA) (see above for application instructions) for the University to certify your loan eligibility. Private loans that are used to cover prior semesters may require additional information for approval, such as letters certifying indebtedness, attendance verification, official transcripts, etc. As such, when requesting funding for prior terms, be sure to reference the correct academic year on your

application.

The basic process involved with securing private loans is the electronic filing of an application, institutional certification, and approval information. The University will assist you in this process and will determine for you the maximum loan amount you will be allowed to borrow based on your estimated cost of attendance and pre-existing financial aid awards.

EMPLOYEE EDUCATION PLANS

Many companies pay all or part of the tuition of their employees under tuition refund plans. Employed students attending the University should ask their personnel officers or training directors about the existence of a company tuition plan. Students who receive tuition reimbursement and LIU employees who receive tuition remission must apply with Human Resources.

Policies

Federal Student Aid Credit Balances and Refunds

It is the University's policy to ensure Federal Student Aid (FSA) credit balances are managed in accordance with Federal and other regulations. When the University disburses Title IV aid to a student's account and the total amount of all Title IV aid exceeds the amount of tuition and fees, room and board, and other billed charges, the University will pay the resulting credit balance directly to the student or parent via check as soon as possible but:

- no later than 14 days after the balance occurred if the credit balance occurred after the first day of class of a payment period; or
- no later than 14 days after the first day of class of a payment period if the credit balance occurred on or before the first day of class of that payment period.

The Office of Enrollment Services monitors FSA credit balances on a daily basis for all active financial aid years. Refund checks are processed at University Center each day after the receipt of refund lists from the campuses. If PLUS loan funds create the credit balance, the refund will be issued to the parent unless he/she has authorized the University in writing or through studentaid.gov to transfer the proceeds directly to the student for whom the loan is made. The University issues refund checks by mail to the student's and/or parent's permanent address on record. Students may also set up direct deposit refunding by adding their domestic bank account of choice to their MyLIU account. Refund checks that are unclaimed after 240 days will be returned to the Department of Education. The University does not require students to take any action to obtain their credit balance. It is the sole responsibility of the University to pay all FSA credit balance within the 14-day regulatory time frame. The University may use current year funds to satisfy prior award year charges for tuition, fees, room and board for a total that does not exceed $200.

Notwithstanding any authorization obtained by the University, LIU will provide students with any remaining FSA credit balances resulting from FSA loan funds by the end of the loan period and any other FSA program credit balances by the end of the last payment period in the award year for which the funds were awarded. Students of parents who receive an FSA refund triggered by the disbursement of Title IV funds may still owe a balance to the University, most often related to a prior term or a subsequent withdrawal from some or all of their classes. Upon receiving a refund, students and/or parents should verify whether any outstanding balance remains on the account and determine how best to satisfy payment obligations so as to avoid any holds or late payment fees being placed on the account. If a student or parent overpays a student's account, related credit balances will be refunded to the student, regardless of the source of payment. Overpayments resulting from credit card transactions will be refunded to the original credit card from which the payment was made. EFT and wire transfers will be refunded to the original bank account from which the payment was made. All other non-FSA credit balances will be refunded by check or via direct deposit if the student has added their bank account of choice to their MyLIU account.

New York State Tap Waiver Policy

Full time students who are New York State (NYS) residents and have applied for the NYS Tuition Assistance Program (TAP) will receive an award notice from New York State. Each semester, the award must be certified by the University based on certain regulatory and academic requirements. Among the requirements is the obligation of the student to maintain "good academic standing" as defined in NYCCRR 8 §145-2.2 and as it relates to the following:

- Pursuit of Program is defined as receiving an 'A-F' letter grade in a certain percentage of courses each semester depending on the number of TAP/State awards the student has received.
- Satisfactory Academic Progress requires students to accumulate a specified number of credits and achieve a specified cumulative grade point average each term depending on the number of TAP/State award payments the student has received.

Students who fail to maintain good academic standing as the result of unforeseen or extraordinary circumstances, and who thus become ineligible for a TAP award, may apply to the University for a TAP Waiver. In certain cases, the requirements regarding Pursuit of Program or Satisfactory Academic Progress may be waived once during a student's undergraduate enrollment. Waivers are based on an undue hardship that has affected the student's ability to maintain good academic standing during a particular semester. A waiver may be granted only when there is a reasonable expectation that the student will meet future State requirements. Waivers are based on documented evidence of:

- a death or illness in the student's family
- serious illness of the student
- other extenuating circumstances beyond the student's control.

Waiver requests must be made in writing to the Office of Enrollment Services and must include:

- a letter stating the reasons for the student's failure to meet academic requirements and how conditions have changed so that future academic progress will not be impeded
- pertinent documentation supporting the waiver application (e.g., physician's written statement, death certificate, etc.)
- a written recommendation from the student's Dean

Return of Federal Funds Policy

The University returns Federal funds in accordance with Federal regulations.

Students who receive Title IV federal aid and withdraw from all courses prior to completing 60 percent of the academic term will have their federal financial aid pro-rated in accordance with a Return to Title IV (R2T4) calculation. After the 60 percent point of the academic term, students are considered to have earned all of their Title IV aid for the term.

For students who officially withdrawal from the University, the last date of attendance will be either: 1) the date that the student submits to the Office of Enrollment Services a signed Official Withdrawal Application; or 2) the date that the student emails the Office of Enrollment Services requesting to withdraw and providing all required information. In cases where the student partially withdraws from some classes before fully withdrawing for the term, the University will use the latest date as the last date of attendance. Students who are granted an official leave of absence in accordance with the University's Leave of Absence Policy are not considered to have withdrawn for the term.

For students who unofficially withdraw from the University, the last date of attendance will be the midpoint of the term. For students who receive a combination of W, NC, UW grades and one F, the student will be considered to be in attendance unless the individual who submitted the F grade,

upon request by the Registrar, does not change the grade to a NC.

The calculation of the amount of Title IV assistance earned by the student is based on the payment period associated with the term during which the student withdrew from classes. The payment period represents the duration between the start and end date of the term, less any scheduled breaks of five consecutive days or more.

To determine the amount of Title IV aid to be considered, the University will calculate the total amount of disbursed Title IV aid for the term in which the student withdrew. Aid is counted in the calculation if it has been applied to the student's account on or before the date the student withdrew or could have been disbursed had the student still been registered for classes. The amount of this Title IV aid earned is calculated on a pro-rata basis using the last date of attendance within the payment period.
The amount of unearned aid to be returned is based on the total institutional charges for the term, which includes tuition, fees, room, and board, less the amount of aid earned by the student. The University will return, in the order specified below, the lesser of the following:

- the total amount of unearned Title IV assistance to be returned; or
- the total amount of unearned institutional charges.

Title IV funds that are not the University's responsibility to return must be returned by the student. The University will notify each student in writing when they have a responsibility to return funds. In certain cases, the return of unearned aid will result in a balance due to the University, particularly if the student previously received and cashed one or more refund checks.

The portion of federal aid that is not earned by a student will be returned to the appropriate federal student aid program(s) in the following order:

- Federal Direct Unsubsidized Loan
- Federal Direct Subsidized Loan
- Federal Perkins Loan
- Federal Direct Graduate PLUS Loan
- Federal Direct Parent PLUS Loan
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant

Once the University determines which federal student aid program(s) are to receive returns, a formal written letter is mailed to the student.

The University will return the amount of Title IV funds for which it is responsible as soon as possible but no later than 45 days after the student's last date of attendance as defined above. For students who unofficially withdraw from the University, Title IV funds will be returned no later than 45 days after the end of the term.

Returns of Title IV grant funds, other than funds that are being returned to stay in compliance with the excess cash requirements, are offset by a downward reduction in the student's records at the federal Common Origination and Disbursement (COD) system. Similarly, all returns of Direct Loan funds are offset by downward reductions to a student's record at COD. In addition, when all or a portion of a Direct Loan is cancelled (either because the borrower requested the cancellation within the regulatory time frames or to comply with statutory or regulatory requirements), the University will make the appropriate adjustment to the student's record in COD. All returns of FSA Grants and Direct Loan funds previously disbursed are also performed by the University through the federal G5 system. If the total amount of Title IV aid that the student earned is greater than the total amount of Title IV aid that was disbursed to the student or on behalf of the student in the case of a PLUS loan, as of the student's last date of attendance, the difference between these amounts must be treated as a post-withdrawal disbursement.

If outstanding charges exist on the student's account, the University will obtain written confirmation from the student and/or parent to determine if they wish to have a Title IV post-withdrawal disbursement processed. Upon receipt of written approval, the University will apply the funds directly to the outstanding balance due. If the student and/or parent does not respond, no post-withdrawal disbursement will occur.

Standards for Satisfactory Academic Progress (SAP)

Students are required to make satisfactory academic progress (SAP) toward the completion of a registered degree or certificate program in order to receive federal financial aid and state tuition assistance. Satisfactory academic progress is measured by a student's cumulative grade point average (GPA) and the amount of credits they have earned.

Standards for Federal Financial Aid Programs

Federal regulations require students to make satisfactory academic progress (SAP) toward the completion of a degree or certificate program in order to receive Title IV financial aid, which includes Federal Pell and SEOG Grants, Federal Work Study, Federal Perkins Loans and the Federal Direct Loan Program. Satisfactory academic progress is measured qualitatively and quantitatively by two components: a student's cumulative grade point average (GPA) and the amount of credits they have earned relative to their year in school and enrollment status.

Satisfactory academic progress is measured annually, at the end of the Spring semester, after all grades have been submitted. Students failing to meet the above criteria are eligible to appeal this decision if extenuating circumstances played a factor in their academics. An appeal must be made in writing to the University and include an explanation of the circumstance that may have adversely affected the student's ability to meet the academic requirements, and the changes that have occurred which will allow them to make SAP in the future. All appeals must be accompanied by supporting documentation, such as a letter from a doctor or attorney. If an appeal is granted, the student will either: 1) be placed on probationary status for one semester after which the student must meet SAP guidelines; or 2) be successfully adhering to an individualized academic plan that was developed for them as part of their appeal. Failure to meet these criteria will result in loss of eligibility for Title IV funds.

Students wishing to receive Title IV financial aid for summer semesters may have these awards evaluated and offered prior to a determination of SAP. All students receiving summer aid will have their SAP evaluated after all spring grades have been submitted. Students not making satisfactory academic progress will have their summer aid cancelled and will be liable for all assessed charges unless an appeal is filed and granted as outlined above.

The criteria below outline the progress that is required for a full-time undergraduate student to be considered in good standing:

Credits Attempted	Credits Earned	Credits Earned	Cum GPA Required
0-29	50%	0 - 29	1.8
30-121	67%	30 - 59	1.9
122-192	80%	60 and above	2.0

The criteria below outline the progress that is required for a full-time graduate or dual degree student in their graduate phase of studies to be considered in good standing:

Completion Rate Requirement: All students must earn at least 67 percent of their attempted hours. The maximum time frame to complete each degree varies by department and is outlined in the Academic Catalogs under the specific degree program.

GPA Requirement: Students who have earned fewer than 13 credits must maintain a 2.5 GPA; students who have earned 13 credits or more must maintain a 3.0 GPA.

The criteria below describe the progress that is required for a full time professional Pharm.D. student to be considered in good standing:

SAP Completion Requirements	**SAP**

GPA Requirements

Credits Attempted	*Credits Earned*	*Total Credits Earned*	*Cum GPA Required*
0 - 29	50%	0- 29	1.8
30-208	67%	30- 59	1.9
209 and above	80%	60- 138	2.0
		139 and above	2.0

The criteria below outline the progress that is required for a full-time Doctor of Veterinary Medicine student to be considered in good standing:

- Completion Rate Requirement: All students must earn at least 67 of their attempted hours. Students may not receive federal aid for classwork that exceeds 150 percent of their degree requirements.
- GPA Requirement: Students must maintain a 2.0 GPA

Federal SAP requirements also include the following criteria:

- Progress standards for part-time students are prorated based upon the criteria above.
- Qualifying transfer credits are counted as both attempted and earned credits but have no effect on the GPA.
- Grades of W (Withdrawal), NC (No Credit Earned), INC (Incomplete), and IF (Incomplete Fail) are counted as credits attempted but not completed, and do not affect the GPA.
- Repeated classes will count only once towards credits completed. A student may receive aid for a repeated class that has been successfully completed once.
- Students may not receive Federal aid for classwork that exceeds 150 percent of their degree requirements.
- Any departmental requirements that exceed these standards must be adhered to for the purposes of evaluating SAP.

Standards for New York State Awards

To receive financial aid awards from New York State, including undergraduate Tuition Assistance Program (TAP) funding, students must meet academic standing requirements as defined by the New York State Education Department. These requirements are different from those set forth by the Federal government, and are applicable only to New York State awards.

The basic measures for good academic standing for TAP Awards include the following:

- Pursuit of Program: A student must receive a passing or failing grade (A-F) in a certain percentage of courses each term.
- Satisfactory Academic Progress: A student must accumulate a specified number of credits and achieve a specified cumulative grade point average (GPA).

The requirements for meeting these standards increase as the student progresses, and are based upon the number of State awards that the student has already received. Students failing to meet the required criteria are eligible to request a one-time waiver of the academic and/or "C" average requirement(s) if extenuating circumstances played a factor in their academics.

Waivers may be granted in accordance with NYCCRR 8 §145-2.2.

The chart below outlines the progress that is required for an undergraduate student to be considered in good standing:

Before Being Certified for Payment

Semester	Must accrue this many credits	With at least this GPA
1st	0	0
2nd	6	1.5
3rd	15	1.8
4th	27	1.8
5th	39	2.0
6th	51	2.0
7th	66	2.0
8th	81	2.0
9th	96	2.0
10th	111	2.0

New York State SAP requirements also include the following criteria:

- Students must be registered for a minimum of 12 credits per semester.
- Students may not receive a New York State award for repeating a class that they have already successfully completed (i.e. the credits for a repeated class for which the student has already received a satisfactory grade will not count towards the full-time requirement).
- The standards that students must meet are dependent upon when they first received an award from NY State, as well as their remedial status.
- Students are evaluated according to their total TAP points received, including any awards received at previous institutions.
- Students must complete a minimum number of credits each term, as well as on a cumulative basis, to continue to receive TAP funding.
- Students who have accrued 60 credits are required to declare a major to maintain their TAP eligibility.
- Students must maintain a minimum grade point average (GPA) prior to being certified for a TAP payment. This average increases as students progress in payment points.
- All students must have a cumulative GPA of 2.0 or better after accumulating 24 or more payment points (e.g., four full time semesters).
- Students who are not making progress, and/or not meeting the "C" average requirement may request a one-time waiver if extenuating circumstances affected their academic performance.

Enhanced Tuition Awards (ETA)

Award recipients selected by New York State must meet the following criteria to remain eligible for ETA awards. Failure to meet these requirements will also result in the conversion of the state portion of your grant into a loan.

- Must meet annual income requirements ($125,000 or below).
- Must earn a passing grade in your coursework.
- Must be registered for at least 12 credits in the Fall to receive the first payment and earn at least 30 credits by the end of Spring to receive the second payment.
- Must continue to meet New York State residency requirements.
- Students in an undergraduate program of study normally requiring five years (HEOP) are eligible to receive the award for five years. Students with disabilities under the ADA are allowed to attend on a part-time basis and their awards will be prorated.

Student Loan Counseling Policy

The University follows federal regulations 34 CFR 685.304 governing federal direct loan programs and 42 CFR Part 57 governing the HRSA health professions student loan program.

In accordance with these provisions, LIU manages the loan counseling process by identifying:

- students who require entrance and exit counseling
- methods by which the University communicates with students regarding entrance and exit counseling
- process by which students will receive counseling; and
- procedures to be followed by students who do not complete the loan counseling process

Verification of FInancial Aid Information

There is a process for verifying application information and making corrections on a student's Free Application for Federal Student Aid (FAFSA) with the Department of Education's Central Processing System (CPS). The regulations in 34 CFR Part 668 Subpart E govern institutional verification of information submitted by applicants for federal student financial assistance.

In accordance with the provisions of Subpart E, LIU has established verification procedures that address the following:

- the time period within which an applicant must provide any documentation requested by the University
- the consequences of an applicant's failure to provide the requested documentation within the specified time period
- the method by which the University notifies an applicant of the results of its verification if, as a result of verification, the applicant's Expected Family Contribution (EFC) changes and results in a change in the amount of the applicant's assistance under the Title IV, Higher Education Act (HEA) programs;
- the procedures the University will follow or the procedures the University will require an applicant to follow to correct FAFSA information determined to be in error; and
- the procedures the University will follow for making referrals to the Office of Inspector General.

Institutional Responsibility: The University must require an applicant whose FAFSA information is selected for verification to submit supporting documentation to verify specified data elements of the FAFSA, unless the applicant qualifies for a federal exclusion.

Applicant Responsibility: If the University requests documents or information from an applicant under this Subpart E, the applicant must provide the specified documents or information.

Undergraduate Programs

The expected length of an undergraduate program is eight terms (four academic years). A student’s remaining Expected Time to Credential is based on the portion of the program already completed, including applicable transfer credits and summer coursework, and will be used to determine eligibility for applicable federal student loan provisions.

Graduate and Professional Programs

The University establishes the expected length of each program of study. A student’s remaining Expected Time to Credential is based on the published program length and the portion of the program already completed, including applicable transfer credits and summer coursework, and will be used to determine eligibility for applicable federal student loan provisions.

Program	Time to Completion
Drug Regulatory Affairs MS	4 terms
Pharmacy Administration MS	4 terms
Pharmaceutics MS	4 terms
Pharmacology/Toxicology MS	4 terms
Pharmacetuical Sciences PhD	10 terms
Pharmacy Professional PharmD	12 terms

LIBRARY

The LIU Libraries serve a combined total of over 16,000 students, more than 300 full-time faculty members, and over 1,300 part-time faculty across residential and regional campuses, as well as the university's international sites. The university's libraries share many online resources that can be accessed from anywhere at any time via remote access including subscriptions to more than 343,000 online journals, 260 online databases, 369,000 electronic books, and 89,000 files of streaming media.

Collectively, the university's libraries house approximately 606,000 print books and more than 13,700 non-print media items. The collections of all LIU libraries are listed in LIUCAT, the library catalog. Books, journal articles, and other library materials owned by LIU's libraries, but not available at a particular campus, can be requested through LIUCAT and supplied via LIU's intralibrary loan service. Items not available at the LIU libraries can be obtained through interlibrary loans and sent to the campus or delivered electronically. In addition, the LIU Libraries administer the Digital Commons @ LIU, an open access online repository that preserves, promotes, and disseminates the academic work of LIU students and faculty.

As the intellectual center of each campus, the LIU Libraries prepare LIU students for academic success, lifelong learning, and being responsible global citizens. The LIU Libraries are committed to supporting the mission of the University, and to learning and inquiry, as well as the creation of new knowledge and its dissemination.

The LIU Libraries provide reference, instruction, research, circulation, reserves, and interlibrary loan services. The LIU Libraries have computers for student use, wireless access, a variety of seating options, including individual study carrels, quiet and group study space, and copy and scanning facilities. These computers and other computers in the library, are also equipped with productivity software such as word processing, spreadsheet, and presentation programs. The university's libraries also have instructional labs, equipped with computers that provide access to databases, the library catalog, and the Internet as well as up-to-date word processing, spreadsheet, presentation, and database programs. Printing and scanning facilities are available for student use.

Archives and Special Collections are available at the LIU Brooklyn and LIU Post libraries. Highlights of the Special Collections at the LIU Brooklyn Library include the Artist Books Collection, the New York African Society for Mutual Relief Collection, the Robert C. Weinberg Collection, and the Seawanhaka Student Newspaper Collection. The LIU Post Library houses more than 30 distinguished rare book collections and 75 major archival collections. Highlights include the pre-eminent American Juvenile Collection; the Archives of LIU and LIU Post; the Original Movie Poster Research Collection; Theodore Roosevelt Association Collection and Cedar Swamp Historical Society Collection (Long Island); the Eugene and Carlotta O'Neill Personal Library; and the Winthrop Palmer Collection: French & Irish Literature. The Digital Initiatives (DI)/Art Image Collection at the LIU Post Library has a collection of slides in multiple formats, a growing collection of digital images, including the William Randolph Hearst Archive.

The LIU Libraries also have a media collection at each campus library. The multimedia collections and media equipment are available to support curricular needs. The Instructional Media Center (IMC) is the multimedia resource center and the K-12 curriculum center for LIU Post. In addition, the university's libraries have the LIU Brooklyn Library's Cyber Lab, a "green" lab, its "smart" instructional labs, and the LIU Post Library's Instructional Lab.

The LIU Libraries provide remote access 24/7 and offer specialized tools such as Journal Finder and LibGuides to support the teaching, learning, and research requirements of the faculty and students. In addition, the university's libraries are members of several consortia, providing additional resources and services to LIU users.

In addition to information literacy classes and curriculum-integrated instruction, the LIU Libraries provide a wide range of reference services including drop-in, telephone, email, chat, and text reference services. Research consultations by appointment are also available to users. Library faculty and staff are available to help students and faculty with reference questions and research strategies.

PROFESSIONAL PROGRAM

LIU Pharmacy (The Arnold & Marie Schwartz College of Pharmacy and Health Sciences) offers a Doctor of Pharmacy (Pharm.D.) degree program to prepare students for entry-level pharmacy practice. The program consists of two years of preprofessional studies (offered through LIU Brooklyn's Richard L. Conolly College of Liberal Arts and Sciences) and four years of professional studies. Students may also enter the professional phase after completing another degree as long as admission requirements are satisfied.

PROFESSIONAL PROGRAM FOR THE DOCTOR OF PHARMACY

[Program Code: 21294] {HEGIS: 1211}

Introduction

LIU Pharmacy offers a four-year professional curriculum leading to the entry-level degree of Doctor of Pharmacy (Pharm.D.). Students may enter the professional phase of the program in the Fall semester only.

The Doctor of Pharmacy is classified as a "doctor's degree-professional practice" by the U.S. Department of Education. It consists of at least six full-time years of academic study and includes at least two years of preprofessional and four years of professional preparation.

Degree Requirements

Upon recommendation of the Faculty, and approval by the Board of Trustees, the degree of Doctor of Pharmacy is conferred by Long Island University upon a candidate who has completed the required curriculum, containing a minimum of 219 academic credits. Matriculants must maintain a cumulative and a professional phase grade-point average of at least 2.00 to remain in good academic standing.

ADMISSION

Application Process and Deadlines for the Professional Phase (P-3) of the Program

Admission into the professional phase of the program is highly competitive. While objective measures of academic achievement and grade point average (GPA); course load, selection and successful completion rate are heavily considered factors for admission, they are not the sole criteria. In addition to academic competence other selection criteria that may be considered by the college include but are not limited to:

- written and verbal communication skills
- community service and extracurricular activities
- demonstration of leadership
- understanding of the profession of pharmacy and motivation for entering the profession
- work experience
- letters of recommendation, particularly those from alumni of the college and other individuals known to the college

To receive first consideration, applicants must be currently enrolled in the pre-professional phase of the Doctor of Pharmacy program, must have achieved a GPA of 2.70 in all attempted college work; a GPA of 2.70 in all attempted and required science courses (specifically Biology I and II, 205, 237 and 238, Physics 127, Chemistry 103,104, 221 and 222) and a GPA of 2.70 in all attempted and required math courses (specifically Math 140 and 100). Preference is also given to those applicants who satisfactorily complete all P1 and P2 course requirements by the end of the spring semester for the following fall. An application for admission into the professional phase of the program must be submitted to the college through PharmCAS by June 1st. A personal interview is required. Not all applicants will be afforded the opportunity for a personal interview. Applicants selected for an interview will be among those in the application pool demonstrating the highest academic achievement and potential. Additional requirements for admission into the professional phase include the ability to meet the technical standards, a criminal back check, and a drug screen.

Students who are accepted and enroll as first-year student pharmacy majors in the pre-professional phase of the program receive preferential consideration for admission into the professional phase of the program provided they complete all pre-professional program requirements by the conclusion of the spring semester of their second year of study. A varying percentage of available seats in each professional class are set aside for such students depending upon the overall number and overall level of demonstrated academic performance of eligible students with institutional preference in any given year. The remaining seats are open to all applicants for the professional phase. Acceptance into the professional phase of the program is not guaranteed for students receiving institutional preference since the ultimate selection is determined through the application of the criteria discussed in the preceding paragraphs. Due to the highly competitive nature of the program, not all students meeting the basic academic requirements of the program will be selected for acceptance into the professional phase.

Students selected for the professional phase of the program (P3) may enter only in the fall semester. Application to the professional phase for external transfer as well as current LIU students is done through the Pharmacy College Admission Service (PharmCAS). The deadline for application to the program is also posted on the college's School Page on the PharmCAS website: (www.pharmcas.org).

Pharmacy Year 3 (P3) PharmCAS deadline: **June 3, 2025**

Note: Deadline dates are subject to change based on administrative calendar changes. Please consult the admissions website at: www.liu.edu/brooklyn/admissions for more information related to the term of the intended application.

Technical Standards for Admission and Program Continuation

The mission of the Arnold & Marie Schwartz College of Pharmacy and Health Sciences is to prepare students to enter the practice of pharmacy. The following technical standards describe the non-academic qualifications required, in addition to academic performance, that the college considers essential for admission to, and continuance in, the Doctor of Pharmacy (Pharm.D.) program. A candidate for the Pharm.D. degree must possess the skills and abilities of the types listed below. The standards are in place to ensure your success in the program but also to protect the safety of the patients you will manage. Depending on the circumstances, reasonable accommodations for disabilities may be possible and made available, however, candidates and continuing students are ultimately responsible for performing in a reasonably independent manner.

The college has established these technical standards in the context of the following interests: 1) the rights of applicants and students; 2) the safety of students and patients; and 3) the significant experiential education requirements of the curriculum. These interests and the nature of the educational activities in the Pharm.D. program may prevent some prospective students with disabilities from qualifying for admission and continuing students with disabilities from continuing in the program.

The technical standards described in this document are those that allow an individual to perform at the minimally acceptable level in the identified activity. Applicants and students must be able to satisfy, with or without the use of appropriate auxiliary aids (including prosthetic devices), the following technical standards which relate to physical, cognitive, and behavioral abilities

relevant to successful completion of the Pharm.D. program.

- Observational – Through the use of visual, auditory, and somatic senses, students must be able to observe lectures, demonstrations, and experiments, read information from a computer screen, and observe a patient at a distance and close-at-hand to accurately assess a patient's physical condition, obtain a patient history, and perform physical assessments.
- Communications – Students should be able to speak, hear, and observe patients in order to elicit information and perceive non-verbal communication such as facial expressions, effects, and body language. Communication skills include the appropriate use of spoken and written English.
- Behavioral and Social Attributes – Students should demonstrate maturity, integrity, compassion and respect for others. The student must possess the emotional and mental health required for full use of their intellectual abilities.
- Motor – The student must have sufficient motor skills necessary to prepare all routine forms of medication orders including compounding, administering, and dispensing; and be able to elicit patient information through the use of physical assessment techniques.
- Intellectual, Conceptual, Integrative and Quantitative Ability – Students must have effective and efficient learning skills to master an entry-level doctorate program. They must be able to learn through a variety of teaching methods (e.g. classroom instruction, small group activities, individual study, experiential activities, and self-learning. Students must be able to read, comprehend, analyze, and interpret data in order to respond to information related to medical situations in an organized manner. Intellectual abilities must be sufficient enough to analyze and synthesize information from a large variety of sources.

The college does not discriminate against qualified disabled individuals and works with the university's campus-based Office of Student Support Services to support qualified students with documented disabilities in fully participating in all college programs and activities. Methods toward achieving success and/or equal opportunities include academic adjustments, auxiliary aids and services, and other reasonable accommodations that may be provided to individuals to remove or lessen the effects of disability-related barriers. Examples of auxiliary aids and services include providing sign language interpreters or other assistive technology.

The applicant should evaluate him/herself for compliance with these technical standards. Submission of an affidavit will serve as testimony the student has read and understands these standards and acknowledges compliance with them.

Transfer from Other Colleges of Pharmacy

Students seeking transfer from colleges of pharmacy accredited by the Accreditation Council for Pharmacy Education (ACPE) must provide, in addition to official transcripts of all academic work, a statement of their reasons for seeking transfer and a letter of evaluation from the dean of their present college of pharmacy.

International Applicants

Applicants who are not citizens or permanent residents of the United States apply to LIU as international students. Applications for international admission should be submitted to the Office of Admissions by February 1 for fall admission or by September 1 for spring admission.

Applicants should submit the below required material for consideration:

- Original official records of all secondary school and/or university work, including graduation certificate or equivalent. Official certified translations in English are also required if the records are in a language other than English.
- Non-refundable application fee.
- Professional evaluation of their university credits from a NACES-member organization (www.NACES.org), if required.
- Official Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Pearson Test of English (PTE) scores.
- Portfolio or video audition (if required for admission into or scholarship consideration for particular programs).

Applicants may submit the below optional material for consideration:

- SAT or ACT scores may be submitted admission. Test scores may be submitted in lieu of language testing scores.
- Recommendation from one teacher or guidance counselor.

Each applicant is considered through a review of their application and supporting material.

Language Proficiency may be determined based on the criteria below:

- TOEFL score for undergraduate: 75 (Some academic programs may require a higher score or previous university-level academic coursework in the United States.)
- Minimum IELTS score for admission: 6.0
- SAT or ACT
- ELS 112 completion certificate

Admitted students who intend to apply for an F-1 student visa must also submit an I-20 application and supporting documentation showing that the student or sponsor is willing and able to undertake the approximate costs of education and living expenses. A copy of a valid passport is also required. Upon acceptance, eligible students are sent a "Certificate of Eligibility for Nonimmigrant (F-1) Student Status" (also called a Form I-20). This form may be used to apply for an F-1 entrance visa to the U.S. issued by American embassies abroad.

International students are required to submit their LIU tuition deposit in order to receive their I-20. Once students receive their I-20 released by LIU they are able to begin the process of obtaining an F-1 visa to study in the United States.

For detailed information on immigration policy and maintaining F-1 status, international students should familiarize themselves with the LIU International Student Handbook.

Visiting Students

The college accepts visiting students who wish to audit or enroll for credit in pharmacy courses on a non-matriculated basis, depending on space availability. Such applicants must submit a Visiting Student Application (available from the Office of Admissions) indicating the specific courses for which they wish to enroll. Applicants who have completed all stated prerequisites will be allowed to enroll, with the approval of the course instructor(s).

Readmission

If a student has been in good academic standing, has withdrawn from all courses and desires to return to LIU Pharmacy within one year of his/her withdrawal, he/she may be considered for readmission by completing an application for readmission, available from the Admissions Office, subject to the approval of the Assistant Dean of Admissions and/or the Assistant Dean of Student Academic and Professional Affairs. Students are advised that readmission is not guaranteed except in such cases where a leave of absence has been granted by the Assistant Dean for Student Academic and Professional Affairs and then only within the time frame established for the leave of absence. Students who have been withdrawn from the college for more than one year are generally not granted readmission. Such time limits do not apply to students who have been fulfilling service requirements in the Armed Forces of the United States.

If a student has been suspended or dismissed for disciplinary reasons and desires to return to LIU Pharmacy, his/her application for readmission willbe referred to apply through PharmCas

If a student has been on academic probation, has withdrawn from all classes and desires to return to

LIU Pharmacy, his/her application for readmission is referred to the Assistant Dean for Student Academic and Professional Affairs. The Assistant Dean's office will advise the student of the procedure described above, which may be required for his/her readmission. If the Assistant Dean approves the recommendations of the committee for readmission, such student will be readmitted and is on probation.

New York State Immunization Law

In accordance with the New York State Department of Health, the following immunizations are required at Long Island University:

Measles, Mumps, and Rubella (MMR): In accordance with New York State Public Health Law § 2165, all students born on or after January 1, 1957 and are enrolled for at least six (6) credits or more are required to provide Long Island University with certified proof of vaccination from a health care provider.
Meningococcal Disease (Meningitis): In accordance with New York State Public Health Law § 2167 all students enrolled for at least six (6) credits or more are required to provide the University with certified proof of vaccination within the past 10 years from a health care provider.
Rabies Vaccine: In accordance with CDC recommendations, all students enrolled in the College of Veterinary Medicine are required to provide the University with certified proof of rabies pre-exposure prophylaxis (PreP) vaccination and proof of continued compliance during their enrollment at the University.

Students may request a medical or religious exemption from any of the vaccination requirements set forth above by submitting documentation in writing to the Center for Healthy Living, the department responsible for the collection and validation of immunization documents.

Proof of immunization, or documentation for exemption, must be submitted on the Immunization Portal prior to the beginning of the first semester of classes.

The University reserves the right to impose additional immunization requirements in collaboration with local and state health directives or recommendations.

The Profession of Pharmacy

Dramatic changes taking place in the healthcare system are creating many new and exciting roles for pharmacists. The pharmacist is now not only responsible for the safe and effective distribution of prescription and nonprescription medication but is also assuming the role of pharmaceutical therapy advisor and manager, having increasingly more patient-care responsibilities.

The entry-level pharmacist is expected to participate fully in the team-based management of the patient, including the rendering of independent clinical judgments. The pharmacist must be proficient in the search for and retrieval of information from the scientific literature, utilization of complex pharmacokinetic models to determine appropriate doses, development of individualized pharmaceutical care plans, communication with patients and health professionals, documentation of pharmaceutical interventions taking into account patients' knowledge, beliefs, and behavior, pharmacoeconomic analysis of alternative pharmaceutical interventions, and justification of services billed to managed health-care organizations and other payers.

Curricular Philosophy

The Arnold & Marie Schwartz College of Pharmacy and Health Sciences

In advancement of its mission and vision, The Arnold & Marie Schwartz College of Pharmacy and Health Sciences at Long Island University is dedicated to developing analytically strong and empathetic new pharmacists that practice evidence-based pharmacy utilizing an interprofessional approach to patient-centered care and improving public health. We view the Doctor of Pharmacy curriculum as a tool for the development of these pharmacists. Our approach seeks the following:

- To empower student pharmacists to take a leading role in their own acquisition of knowledge through the use of active learning strategies and foster professional integrity through enforcing high levels of personal accountability throughout the curriculum.
- To deliver the curriculum in an organized, integrated and sequential fashion intended to instill the desired attributes in approaches to problem-solving, critical thinking, and to foster development and integration of the knowledge, skills, attitudes, and values required by the profession.
- To begin the curriculum with an emphasis on pharmacist's roles, progress to a consideration of persons as patients, build in-depth expertise of diverse therapies and approaches to patient care and expand to population-based concepts in practice with a focus on serving as patient navigators, advocates and change agents in the health care delivery system.
- To support the curriculum through the provision of a strong foundation in the biomedical, pharmaceutical, social and administrative, and clinical sciences.
- To further develop and ultimately master the skills of pharmacy students in a diverse set of pharmacy practice environments through the accompanying experiential curriculum.
- To provide a supporting foundation of continuous professional and personal development in areas such as innovation, leadership, and entrepreneurship and to introduce post-graduate opportunities in residencies, fellowships, and graduate education through the concomitant co-curriculum experience.

As graduates transition into practice, it is intended that they emerge as life-long learners and entrusted, practice-ready professionals prepared to advance the profession by serving as effective members of interprofessional teams and meeting the health care needs of society as empathetic, culturally sensitive, and patient-centered providers.

Learning Outcomes

The Arnold & Marie Schwartz College of Pharmacy and Health Sciences has been a leader in pharmacy education since its founding in 1886. The college attracts a diverse student population and provides quality pharmacy education through its pursuit of excellence and innovation in teaching, scholarship, and service. The campus environment encourages and promotes creativity, innovation, and collegiality.

Consistent with the mission of Long Island University, the college maintains a strong commitment to access and excellence. In an effort to be consistent with national benchmarks and standards, the College's Curriculum Committee and the Assessment Committee periodically review the program ensuring that it adheres to these national benchmarks, guidelines and standards.

In 2022, the American Association of Colleges of Pharmacy (AACP) developed the fifth version of the Center for the Advancement of Pharmacy Education (CAPE) education outcomes (EO). Educational Outcomes are statements that describe what a learner should be able to do at the end of a program. Educational outcomes represent the knowledge, skills, and attitudes (KSAs) of pharmacists that all students should demonstrate upon graduation. The EOs were created to facilitate curricular discussions with faculty and preceptors within the Academy and to guide curriculum planning, delivery, and assessment within the pharmacy programs.

The EOs serve as the guiding framework for course/curricular review, development of co-curricular and extracurricular activities, mapping, assessment, and remediation efforts of the college. The outcomes are presented in three domains as outlined below.

Domain 1 – Knowledge

1.1 Scientific Thinking

Seek, analyze, integrate, and apply foundational knowledge of medications and pharmacy practice (biomedical; pharmaceutical; social; behavioral, administrative; and clinical sciences; drug classes; and digital health).

2 - Skills

2.1 Problem-solving Process

Use problem solving and critical thinking skills, along with an innovative mindset, to addess challenges and to promote positive change.

2.2 Communication

Actively engage, listen, and communicate verbally, nonverbally, and in writing when interacting with or educationg an individual, group, or organization.

2.3 Cultural and Structural Humility

Mitigate health disparities by considering, recognizing, and navigating cultural and structural factors (e.g. social determinants of health, diversity, equity, inclusion, and accessibility) to improve access and health outcomes.

2.4 Person-centered care

Provide whole person care to individuals as the medication specialist using the Pharmacists' Patient Care Process

2.5 Advocacy

Promote the best interests of patients and/or the pharmacy profession within healthcare settings and at the community, state, or national level.

2.6 Medication-use Process Stewardship

Optimize patient healthcare outcomes using human, financial, technological, and physical resources to improve the safety, efficacy, and environmental impact of medication use systems.

2.7 Interprofessional Collaboration

Actively engage and contribue as a healthcare team member by demonstrating core interprofessional competencies.

2.8 Population Health and Wellness

Assess factors that influence the health and wellness of a population and develop strategies to address those factors.

2.9 Leadership

Demonstrate the ability to influence and support the achievement of shared goals on a team, regardless of one's role.

Domain 3. Attitudes

3.1 Self-awareness

Examine, reflect on, and address personal and professional attributes (e.g., knowledge, metacognition, skills, abilities, beliefs, biases, motivation, help-seeking strategies, and emotional interlligence that could enhance or limit growth, development, and professional identity formation.

3.2 Professionalism
Exhibit attitudes and behaviors that embody a commitment to building and maintaining trust with patients, colleagues, other health care professionals, and society.

Entrustable Professional Activities (EPAs)

EPAs, defined as the essential tasks of a pharmacist that a PharmD student can be entrusted to perform, are employed in required core experiences (i.e., Introductory and Advanced Pharmacy Practice Experiences (IPPEs and APPEs). During these experiential courses, preceptors use an entrustment scale to provide formative feedback and assessment data to help the learner achieve the desired entrustment level. The EPAs employed at the College include:
1. Collect information necessary to identify a patient's medication-related problems and health-related needs.
2. Assess collected information to determine a patient's medication-related problems and health-related needs.
3. Create a care plan in collaboration with the patient, others trusted by the patient, and other health professionals to optimize pharmacologic and nonpharmacologic treatment.
4. Contribute patient specific medication-related expertise as part of an interprofessional care team.
5. Answer medication related questions using scientific literature.
6. Implement a care plan in collaboration with the patient, others trusted by the patient, and other health professionals.
7. Fulfill a medication order.
8. Educate the patient and others by the patient regarding the appropriate use of a medication, device to administer a medication, or self-monitoring test.
9. Monitor and evaluate the safety and effectiveness of a care plan.
10. Report adverse drug events and/or medication errors in accordance with the site specific procedures.
11. Deliver medication or health-related education to health professionals or the public.
12. Identify populations at risk for the prevalent diseases and preventable adverse medication outcomes.
13. Perform the technical, administrative, and supporting operations of a pharmacy practice site.

Preprofessional Phase Course of Study

The pre-professional phase of the program, offered through the College of Sciences and College of Liberal Arts, consists of a minimum of four semesters of coursework in the liberal arts and sciences. Successful completion of two years of preprofessional study (P1 and P2) provides the foundation for admission to the professional pharmacy curriculum. The course sequence for the pre-professional phase is listed below. For course descriptions, please refer to the LIU Brooklyn undergraduate bulletin.

Credentials of students attending other colleges for the pre-professional phase of the program will be evaluated on an individual course basis, and transfer credit will be granted for those courses meeting the requirements of LIU Pharmacy. Only those pre-professional students who meet the progression requirements, as outlined under the heading of Admissions, will be admitted to the first professional year of study in LIU Pharmacy.

While the pre-professional phase of the program is designed to be completed in two academic years, students requiring proficiency and skills courses may have a lengthened course of study.

The preprofessional pharmacy curriculum consists of the following course of study:

Pre-Professional Studies
(Four Semesters)

First Semester

General & Inorganic Chemistry I (CHM 103/103L)	4
General Biology I (BIO 120/120L)	4
English Composition (ENG 110)	3
Introduction to Psychology (PSY 103)	3
	14

Second Semester

General & Inorganic Chemistry II (CHM 104/104L)	4
General Biology II (BIO 122/122L)	4
Global Literature (ENG 115)	3
Calculus I (MTH 140)	4
Micro/Macro Economics (ECO 101 or 102)	3
	18

Third Semester

Organic Chemistry I (CHM 221/221L)	4
**Physics for Pharmacy (PHY 127/127L)	4
***Writing in the Sciences (ENG 178)	3
History 101	3
Human Anatomy & Physiology I (BIO 237/237L)	4
****Pharmacy Orientation Seminar (PHM 1)	0
	18

Fourth Semester

Organic Chemistry II (CHM 222/222L)	4
Human Anatomy/Physiology II (BIO 238/238L)	4
Statistics (MTH 100)	3
Oral Communications (SPE 100)	3
Microbiology (BIO 205/205L)	4
	18

Note: If you have an Associate's degree or a Bachelor's degree, 60 credits, or have an associates degree from a regionally accredited college/university, by the end of summer, then any 24 credits in social science/humanities with a grade of "C" or higher will satisfy the requirement.
**General Physics may satisfy the Physics for Pharmacy requirement (compare course descriptions).
*** ENG 178 is a requirement for all students taking their pre-pharmacy courses at LIU. For students taking their pre-pharmacy courses at institutions other than LIU, a second semester of English Composition may satisfy the Writing in the Sciences requirement.
****Pharmacy Orientation Seminar (PHM 1) must be completed in the P1 or P2 year by all LIU pre-pharmacy major students

Admission Requirements
Students who complete the pre-professional phase of study at LIU Brooklyn or Post and meet the stated progression requirements (see below) are considered for admission in the first professional year (P-3) of the Doctor of Pharmacy program. High school students must submit an application to the LIU Brooklyn or Post Office of Admissions. Admission to the doctoral phase of the highly selective PharmD program is contingent upon the successful completion of the criteria listed below.

- Enroll at Long Island University upon completion of secondary school studies.
- Remain continuously enrolled at LIU in the pre-professional phase.
- Completion of all pre-professional phase courses with a minimum grade of C.
- Maintain a minimum cumulative GPA of 2.0
- Maintain a minimum science and/or math GPA of 2.7
- Successfully complete an interview during the second year of pre-professional studies.
- Successful completion of a criminal background check and drug screen.
- Adhere to the LIU and LIU Pharmacy Codes of Conduct.

Professional Phase Course of Study

The professional segment of the Doctor of Pharmacy program consists of six semesters of didactic and early experiential coursework and an extramural final year of advanced pharmacy practice experiences, which students complete in

hospital, community and other pharmacy practice settings. The professional program provides the specialized education necessary to develop expertise in the ever-broadening field of pharmacy and prepares the student for professional licensure examinations.

All professional courses must be taken in residence. There is no transfer credit for any professional-level course.

All students enrolled in pharmacy courses with an experiential component are required to have satisfactory yearly physical examination reports. Completed health requirements must be submitted to the Office of Experiential Education by the deadline dates established for each academic term. It is the responsibility of each student to visit a physician and to obtain a physical examination, specific laboratory tests and immunizations at the student's own expense. Students must show proof of quantitative positive titers for rubella, rubeola, mumps, varicella and hepatitis B; proof of vaccination and/or qualitative reports are not acceptable to practice sites for these tests. Additionally, students must show proof of a baseline hepatitis C titer which can be qualitative, laboratory report of baseline urinalysis, CBC (complete blood count), and basic metabolic panel as well as proof of having received appropriate booster doses of diphtheria and tetanus (or Tdap). Students need to obtain a test for exposure to tuberculosis – e.g., a PPD (or Mantoux tuberculin test) or a QuantiFeron – immediately before and then every year during experiential education. If a PPD is performed, a 2-step test is required annually; other assessments during the year may be with a 1-step procedure if performed within one year of a previous test. A positive Mantoux (PPD) test will require that the student get a chest x-ray and be assessed for the presence of tuberculosis. The decision to treat the student needs to be discussed with the individual physician. In addition, all students are to be tested for syphilis before commencing an experiential course. Students are also required to obtain an influenza vaccine each year (usually due in October).

The College reserves the right to require additional medical tests or documentation it determines are necessary for protecting the health of the student, other healthcare providers and patients. Individual sites affiliated with the pharmacy program may require additional medical information from students and may require that students submit various forms directly to the experiential site prior to beginning an experiential course.

It is the student's responsibility to fulfill these requirements in order to participate in experiential courses. Failure to submit required reports within the specified time period automatically results in a monetary fine and may deny admittance of students to pharmacy courses with experiential components. Students must prove that they are knowledgeable of the Health Insurance Portability and Accountability Act (HIPAA) as it relates to pharmacy and complete appropriate OSHA (Bloodborne pathogen) training. As such, students will complete College-approved HIPAA and OSHA training programs and might need to complete additional training at individual practice sites.

Prior to beginning introductory and advanced pharmacy practice experiences, each student needs to submit proof of being a U.S. citizen or non-citizen national, is a lawfully admitted immigrant for permanent residence, or is a temporary visitor lawfully admitted for educational study. In addition, students are required to complete an annual criminal background check and undergo a toxicology screen to identify drug use. Results of these screenings can only be accepted if conducted using program-approved vendors and are at the student's own expense. Many sites reserve the right to repeat background checks and drug screens prior to or during an experiential course.

In compliance with the U.S. Public Health Service requirements, it is recommended that pregnant students not enroll in Human Anatomy, Physical Assessment and Drug Administration, or other courses in which students may come into contact with tissue and/or pathogens, or engage in experiential courses where there are patients/clients with infectious diseases unless first receiving written permission from their physicians.

Doctor of Pharmacy Degree Requirements

Pharmacy Preprofessional Studies

Please see the preceding section titled "Preprofessional Phase Course of Study" for a detailed listing of requirements.

Students are required to successfully complete all required third-year PharmD courses before moving forward to any fourth-year courses. Students are required to successfully complete all required fourth-year PharmD courses before moving forward to fifth year courses. Students are required to successfully complete all required fifth-year PharmD courses before moving forward to sixth year courses.

Pharmacy Professional Studies

3rd Year Professional Phase

All courses in the following table are required.

PHM	310	Pathophysiology/Immunology	3.00
PHM	311	Pharmaceutics I	2.00
PHM	312	Pharmaceutics II	2.00
PHM	313	Biochemistry	3.00
PHM	314	Pharmacy Profession and the Health Care System	3.00
PHM	315	Pharmacy and Society	2.00
PHM	320	Molecular Biology	2.00
PHM	321	Principles of Pharmacology/Medicinal Chemistry/Toxicology	2.50
PHM	322	Introduction to Pharmacy Law and the Integrated Pharmaceutical Care Lab	1.00
PHM	323	Pharmaceutics III	3.00
PHM	324	Biostatistics	2.00
PHM	325	Introduction to Pharmacy Practice	3.00
PHM	326	Principles of Physical Assessment and Medication Administration	2.00
PHM	300	P-3 Introductory Pharmacy Practice Experience	0.50

4th Year Professional Phase

All courses in the following table are required.

PHM	410	Human Genetics	2.00
PHM	411	Modular Organ Systems Therapeutics Sequence (MOST I)	4.00
PHM	412	Modular Organ Systems Therapeutics Sequence (MOST II)	4.00
PHM	414	Drug Information and Literature Evaluation	3.00
PHM	415	Pharmacy Practice Laboratory I	1.00
PHM	420	Principles of Health Behavior and Patient-provider Communication	3.00
PHM	421	Pharmaceutics IV	3.00
PHM	422	Pharmaceutical Compounding	1.00
PHM	423	Pharmacy Practice Laboratory II	1.00
PHM	424	Modular Organ Systems Therapeutics Sequence (MOST III)	3.00
PHM	425	Modular Organ Systems Therapeutics Sequence (MOST IV)	3.50
PHM	400	Community Practice Introductory Pharmacy Practice Experience	4.00

5th Year Professional Phase

All courses in the following table are required.

PHM	510	Health Care Informatics	2.00
PHM	511	Pharmaceutics V	3.00
PHM	512	Compounding Laboratory II	1.00
PHM	513	Pharmacy Practice Laboratory III	1.00
PHM	515	Pharmacoeconomics and Pharmacoepidemiology	2.00
PHM	516	Modular Organ Systems Therapeutics Sequence (MOST V)	2.50

PHM	517	Modular Organ Systems Therapeutics Sequence (MOST VI)	2.50
PHM	521	Practice Management	2.00
PHM	522	Public Health & Patient Safety	3.00
PHM	523	Pharmacogenomics	2.00
PHM	524	Clinical Pharmacokinetics	2.00
PHM	525	Pharmacy Law and Ethics	3.00
PHM	528	Modular Organ Systems Therapeutics Sequence (MOST VII)	3.50
PHM	529	Modular Organ Systems Therapeutics Sequence (MOST VIII)	3.00
PHM	540	Self Care Community Practice	1.00
PHM	500	Institutional Practice Introductory Pharmacy Practice Experience	4.00

6th Year Professional Phase (Required Advanced Pharmacy Practice Experiences)

All courses in the following table are required.

PHM	610	Clinical Pharmacy Patient Care Experience Advanced Pharmacy Practice Experience	5.00
PHM	611	Ambulatory Care Advanced Pharmacy Practice Experience	5.00
PHM	612	Community Practice Advanced Pharmacy Practice Experience	5.00
PHM	613	Institutional Practice Advanced Pharmacy Practice Experience	5.00
PHM	614	Inpatient General Medicine Advanced Pharmacy Practice Experience	5.00
PHM	615A	Senior Seminar	2.50
PHM	615B	Senior Seminar	2.50

Professional Electives

Three courses (9 credits) of professional didactic elective courses are required. These can only be taken during years P4 and P5.

Two courses (10 credits) of elective Advanced Pharmacy Practice Experiences are required.

Credit and GPA Requirements

Minimum Total Credits: 141 professional phase, 209 or 210 total*

Minimum Liberal Arts and Sciences Credits: 68 or 69*

Minimum Major GPA: 2.00

Minimum Overall GPA: 2.00

*depending on admission status; see notes for courses FYS 1 and PHM 1 for the Doctor of Pharmacy Degree

Bachelor of Professional Studies (BPS) in Pharmaceutical Sciences

The Bachelor of Professional Studies (BPS) in Pharmaceutical Sciences offers students appropriate preparation for entry into careers and/or graduate study in areas such as pharmaceutical and cosmetic manufacturing, marketing, insurance, regulatory affairs and sales. It is intended as a program that has wide applicability in pharmaceutical-related fields that do not require licensure as a pharmacist.

The BPS in Pharmaceutical Sciences does not lead to license eligibility in the pharmacy profession. Students must continue onto and commplete the Doctor of Pharmancy (PharmD) program. LIU Pharmacy PharmD students eligible to to be awarded the BPS in Pharmaceutical Sciences en route toward the PharmD degree.

Program Mission:

The mission of the Bachelor of Professional Studies (BPS) in Pharmaceutical Sciences at LIU Pharmacy is to prepare students for career opportunities in the physical, life and health sciences and related disciplines that require a bachelor's degree. The BPS degree in Pharmaceutical Sciences positions the graduate for entry into biomedical graduate programs and, more specifically, programs in the pharmaceutical sciences.

The program provides a well-rounded undergraduate education, overlapping with the first two years of the professional phase of the LIU Doctor of Pharmacy program. By the completion of the program students will be able to:

Goal 1. Develop and apply knowledge from the foundational and pharmaceutical sciences to explain drug formulation and action.

- LO1. Demonstrate knowledge of the basic biomedical sciences (e.g., physiology, pathophysiology, biochemistry, microbiology, immunology).
- LO2. Demonstrate knowledge of mechanisms of action of drugs to understand the clinical profile of pharmacological agents.
- LO3. Demonstrate and apply knowledge of pharmacokinetic and pharmacodynamic processes and principles to discuss therapeutic and adverse drug outcomes.
- LO4. Demonstrate the knowledge necessary for the preparation of pharmaceutical products.

Goal 2. Develop knowledge from the social/administrative/behavioral pharmacy sciences that is necessary to evaluate scientific literature and advance population health and patient-centered care.

- LO1. Demonstrate knowledge of social, political, and economic factors that influence the delivery of health care in the United States.
- LO2. Demonstrate knowledge of the organization of various health care delivery systems and the role played by providers in various practice settings.
- LO3. Recognize the social determinants of health that contribute to disparities and inequities in access to health care.
- LO4. Demonstrate knowledge of study designs and statistical methods used in scientific research studies.
- LO5. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information.

Goal 3. Effectively communicate verbally and nonverbally when interacting with an individual, group, or organization.

- LO1. Demonstrate the ability to communicate health-related information and education using effective oral and written skills.

Goal 4. Exhibit professional behaviors and values.

- LO1. Display preparation, initiative, and accountability consistent with a commitment to excellence.
- LO2. Identify, create, implement, evaluate, and modify plans for personal and professional development for the purpose of individual growth.
- LO3. Demonstrate teamwork skills and the ability to collaborate with others.

Bachelor of Professional Studies (BPS) in Pharmaceutical Studies

[Program Code: 38335]

Liberal Arts and Science Courses (68 credits)

Science Course Requirements

BIO	120	General Biology I	4.00
BIO	122	General Biology II	4.00
BIO	205	Microbiology	4.00
BIO	237	Anatomy and Physiology I	4.00
BIO	238	Anatomy and Physiology II	4.00
CHM	103	General and Inorganic Chemistry	4.00
CHM	104	General and Inorganic Chemistry	4.00
CHM	221	Organic Chemistry	4.00
CHM	222	Organic Chemistry	4.00
PHY	127	Physics for Pharmacy	4.00

Mathematics Course Requirements

Both courses [7 credits] from the following table are required.

MTH	140	Calculus I	4.00
MTH	100	Statistics	3.00

English Composition and Writing Course Requirements

6 credits required

ENG	110	English Composition	3.00
ENG	178	Writing in the Sciences	3.00

Additional Core Requirements

One course [3 credits] from the following table are required.

ENG	115	Global Literature	3.00

PSY	103	Introduction to Psychology	3.00
ECO	101 or 102	Macro or Microeconomics	3.00
SPE	100	Public Speaking	3.00

Major Requirements (58 credits)

PHM	310	Pathophysiology/Immunology	3.00
PHM	311	Pharmaceutics I	2.00
PHM	312	Pharmaceutics II	2.00
PHM	313	Biochemistry	3.00
PHM	314	Pharmacy Profession and the Health Care System	3.00
PHM	315	Pharmacy and Society	2.00
PHM	320	Molecular Biology	2.00
PHM	321	Principles of Pharmacology/Medicinal Chemistry/Toxicology	2.50
PHM	323	Pharmaceutics III	3.00
PHM	324	Biostatistics	2.00
PHM	325	Introduction to Pharmacy Practice	3.00
PHM	326	Principles of Physical Assessment and Medication Administration	2.00
PHM	410	Human Genetics	2.00
PHM	411	Modular Organ Systems Therapeutics I	4.00
PHM	412	Modular Organ Systems Therapeutics II	4.00
PHM	414	Drug Information and Literature Evaluation	3.00
PHM	420	Principles of Health Behavior and Patient-provider Communication	3.00
PHM	424	Modular Organ Systems Therapeutics III	3.00
PHM	425	Modular Organ Systems Therapeutics IV	3.50

Electives

Two courses (6 credits) of didactic elective courses are required.

Credits and GPA Requirements

Minimum Total Credits: 126
Minimum Major GPA: 2.00
Minimum Overall GPA: 2.00

ACCELERATED SHARED CREDIT PROGRAMS

PharmD and MBA, Shared-Credit Program

LIU Pharmacy offers a Pharm.D./M.B.A in Business Administration shared credit program in conjunction with the School of Business, Public Administration and Information Sciences (SBPAIS). Students take courses that have been approved by both the College of Pharmacy and SBPAIS to meet the requirements of both the Pharm.D. and M.B.A. degrees. Students enrolled in this program will be well-positioned for broader career opportunities in the fields of pharmacy practice, pharmacy administration and management, health care administration, the pharmaceutical industry, research, advanced business studies or academia.

Students in the summer after their first professional year (P3) of the Pharm.D. program have the option of enrolling in a predetermined sequence of M.B.A. coursework which begins in the summer after the P3 year. Pharm.D. students must have a minimum professional GPA of 3.0 prior to enrolling in the shared credit program. If accepted into the shared credit program, students must meet the academic standards of both the College of Pharmacy and the SBPAIS (refer to the graduate bulletin for the academic standards of the M.B.A. program). To continue in the program they must maintain a minimum GPA of 3.0 in the masters' courses and a minimum GPA of 3.0 in pharmacy courses. Specific questions regarding which courses contribute to the student's Pharm.D. GPA and M.B.A. GPA should be directed to respective academic departments.

Upon successful completion of all Pharm.D. and M.B.A. requirements, students will be awarded both degrees. It is expected that students enrolled in this shared credit program complete both degrees by the end of the final pharmacy professional year (P6). However, students are conferred their Pharm.D. and M.B.A. degrees upon the completion of the credits and the requirements of each.

Pharm.D. / M.B.A. in Business Administration

240 Minimum Total Credits Required

Pharmacy Pre-professional Studies

Please see the pre-professional requirements as described for the Pharm.D. program.

Pharmacy Professional Pharm.D. and Business Administration M.B.A. Required Courses

3rd Year Professional Phase

All courses in the following table are required.

PHM	310	Pathophysiology/Immunology	3.00
PHM	311	Pharmaceutics I	2.00
PHM	312	Pharmaceutics II	2.00
PHM	313	Biochemistry	3.00
PHM	314	Pharmacy Profession and the Health Care System	3.00
PHM	315	Pharmacy and Society	2.00
PHM	320	Molecular Biology	2.00
PHM	321	Principles of Pharmacology/Medicinal Chemistry/Toxicology	2.50
PHM	322	Introduction to Pharmacy Law and the Integrated Pharmaceutical Care Lab	1.00
PHM	323	Pharmaceutics III	3.00
PHM	324	Biostatistics	2.00
PHM	325	Introduction to Pharmacy Practice	3.00
PHM	326	Principles of Physical Assessment and Medication Administration	2.00
PHM	300	P-3 Introductory Pharmacy Practice Experience	0.50

4th Year Professional Phase

All courses in the following table are required.

PHM	410	Human Genetics	2.00
PHM	411	Modular Organ Systems Therapeutics I	4.00
PHM	412	Modular Organ Systems Therapeutics II	4.00
PHM	414	Drug Information and Literature Evaluation	3.00
PHM	415	Pharmacy Practice Laboratory I	1.00
PHM	420	Principles of Health Behavior and Patient-provider Communication	3.00
PHM	421	Pharmaceutics IV	3.00
PHM	422	Pharmaceutical Compounding	1.00
PHM	423	Pharmacy Practice Laboratory II	1.00
PHM	424	Modular Organ Systems Theraputics III	3.00
PHM	425	Modular Organ Systems Therapeutics IV	3.50
PHM	400	Community Practice Introductory Pharmacy Practice Experience	4.00
GBA	510	Financial Accounting for Managers	3.00
GBA	511	Corporate Financial Management	3.00
GBA	513	Marketing Management	3.00
MBA	634	Service and Operations Management	1.50
MBA	635	Entrepreneurship	1.50
MBA	630	Marketing Strategy	1.50
MBA	633	Corporate Financial Policy	1.50

5th Year Professional Phase

All courses in the following table are required.

PHM	510	Health Care Informatics	2.00
PHM	511	Pharmaceutics V	3.00
PHM	512	Compounding Laboratory II	1.00

PHM	513	Pharmacy Practice Laboratory III	1.00
PHM	515	Pharmacoeconomics and Pharmacoepidemiology	2.00
PHM	516	Modular Organ Systems Therapeutics V	2.50
PHM	517	Modular Organ Systems Therapeutics VI	2.50
PHM	521	Practice Management	2.00
PHM	522	Public Health & Patient Safety	3.00
PHM	523	Pharmacogenomics	2.00
PHM	524	Clinical Pharmacokinetics	2.00
PHM	525	Pharmacy Law and Ethics	3.00
PHM	528	Modular Organ Systems Therapeutics VII	3.50
PHM	529	Modular Organ Systems Therapeutics VIII	3.00
PHM	540	Self-Care Community Practice	1.00
PHM	500	Institutional Practice Introductory Pharmacy Practice Experience	4.00
GBA	520	Managerial Economics	3.00
GBA	521	Legal Aspects of Business Administration	3.00
MBA	640	Making Effective Presentations	1.00
MBA	641	Managerial Communications	1.00
MBA	650	Business Intelligence	1.00
MBA	653	Marketing Analysis	1.50
MBA	655	Management of Innovation and Technology	1.50

6th Year Professional Phase (Required Advanced Pharmacy Practice Experiences)

All courses in the following table are required.

PHM	610	Clinical Pharmacy Patient Care Experience Advanced Pharmacy Practice Experience	5.00
PHM	611	Ambulatory Care Advanced Pharmacy Practice Experience	5.00
PHM	612	Community Practice Advanced Pharmacy Practice Experience	5.00
PHM	613	Institutional Practice Advanced Pharmacy Practice Experience	5.00
PHM	614	Inpatient General Medicine Advanced Pharmacy Practice Experience	5.00
PHM	616 or 617	Elective Advanced Pharmacy Practice Experience	5.00
PHM	615	Senior Seminar	2.50 x 2
MBA	651	Marketing Analytics	1.50
MBA	652	Transformational Leadership	1.50
MBA	802	Business Policy for Pharmacists	5.00

Credit and GPA Requirements

Minimum Total Credits: 240*

Minimum Liberal Arts and Sciences Credits: 68 or 69*

Minimum GPA PharmD Professional : 2.00

Minimum GPA MBA: 3.00

* depending on admission status; see notes for courses FYS 1 and PHM 1 for the Doctor of Pharmacy degree

PharmD and MPH Shared-Credit Program

Pharm.D. / M.P.H.Shared Credit Program

Minimum Total Credits Required- 239.

Credits and GPA Requirement:

69 credits pre-professional, 170 professional.

Note: In order to be admitted and progress through the Pharm.D. / M.P.H shared credit program students must meet any and all specific academic requirements set by the college of pharmacy and the school of health professions.

LIU Pharmacy offers a Pharm.D./M.P.H shared credit program in conjunction with the School of Health Professions, Department of Public Health. Students take courses that have been approved by both the College of Pharmacy and School of Health Professions, Department of Public Health to meet the requirements of both the Pharm.D. and the M.P.H. degrees.

Students enrolled in this program will be well-positioned for broader career opportunities in pharmacy practice, public health practice, education, research, and governmental agencies. During the summer between the first and second Pharm.D. professional year (P3-P4) students will begin a predetermined sequence of M.P.H. coursework. Pharm.D. students must be in good academic standing and meet any specific admission requirements for the shared credit program prior to enrolling. In addition, prospective students must also meet any specific M.P.H. program admission requirements. If accepted, students must continue to meet any specific academic progression standards of both the College of Pharmacy and the School of Health Professions (refer to the graduate bulletin for the academic requirements and standards of the M.P.H program). Specific questions regarding which courses contribute to the student's Pharm.D. GPA and M.P.H. GPA should be directed to respective academic departments.

Upon successful completion of all Pharm.D. and M.P.H. requirements, students will be awarded both degrees. It is expected that students enrolled in this shared credit program complete both degrees by the end of the final pharmacy professional year (P6). However, students are conferred their Pharm.D. degree and M.P.H degree upon the completion of the credits and requirements of each.

Pharm.D. / M.P.H.

234.5 minimum credits required (69 pre-pharmacy, 165.5 professional)

Pharmacy Pre-professional Studies

Please see the pre-professional requirements as described for the Pharm.D. program.

Pharmacy Professional Pharm.D. and Masters in Public Health M.P.H. Required Courses (169 credits in the professional phase)

3rd Year Professional Phase

All courses in the following table are required.

PHM	310	Pathophysiology/Immunology	3.00
PHM	311	Pharmaceutics I	2.00
PHM	312	Pharmaceutics II	2.00
PHM	313	Biochemistry	3.00
PHM	314	Pharmacy Profession and the Health Care System	3.00
PHM	315	Pharmacy and Society	2.00
PHM	300	P-3 Introductory Pharmacy Practice Experience	0.50
		Fall Term credit total: 15.5	
PHM	320	Molecular Biology	2.00
PHM	321	Principles of Pharmacology / Medicinal Chemistry / Toxicology	2.50
PHM	322	Introduction to Pharmacy Law and the Integrated Pharmaceutical Care Laboratory	1.00
PHM	323	Pharmaceutics III	3.00
PHM	324	Biostatistics	2.00
PHM	325	Introduction to Pharmacy Practice	3.00
PHM	326	Principles of Physical Assessment and Medication Administration	2.00
		Spring Term credit total: 15.5	
PHM	400	Community Practice, Introductory Practice Experience	4.00
		Summer Term credit total: 4.0	

4th Year Professional Phase

All courses in the following table are required.

PHM	410	Human Genetics	2.00

PHM	411	Modular Organ Systems Therapeutics (MOST) I	4.00
PHM	412	MOST II	4.00
PHM	414	Drug Information and Literature Evaluation	3.00
PHM	415	Pharmacy Practice Laboratory I	1.00
MPH	610	Epidemiology	3.00
MPH	600	Foundations of Public Health and Health Services Management	3.00
		Fall Term credit total: 20.0	
		Winter Term credit total: 0.0	
PHM	420	Principles of Health Behavior and Patient Provider Communication	3.00
PHM	421	Pharmaceutics IV	3.00
PHM	422	Pharmaceutical Compounding	1.00
PHM	423	Pharmacy Practice Laboratory II	1.00
PHM	424	MOST III	3.00
PHM	425	MOST IV	3.50
MPH	735	Research and Evaluation Methods	3.00
MPH	625	Environmental Health	3.00
		Spring Term credit total: 20.5	
PHM	500	Institutional Practice Introductory Pharmacy Practice Experience	4.00
		Summer Term credit total: 4.0	

5th Year Professional Phase

All courses in the following table are required.

PHM	510	Health Care Informatics	2.00
PHM	511	Pharmaceutics V	3.00
PHM	512	Compounding Laboratory II	1.00
PHM	513	Pharmacy Practice Laboratory III	1.00
PHM	514	Practical Application of Biological Sciences	1.00
PHM	515	Pharmacoeconomics and Pharmacoepidemiology	2.00
PHM	516	Modular Organ Systems Therapeutics V	2.50
PHM	517	Modular Organ Systems Therapeutics VI	2.50
PHM	525	Pharmacy Law and Ethics	3.00
MPH	620	Social and Behavioral Sciences in Public Health	3.00
		Fall Term credit total: 21.0	
		Winter Term credit total: 0.0	
PHM	521	Practice Management	2.00
PHM	522	Public Health and Patient Safety	3.00
PHM	523	Pharmacogenomics	2.00
PHM	524	Clinical Pharmacokinetics	2.00
PHM	528	MOST VII	3.50
PHM	529	MOST VIII	3.00
MPH	740	Program Planning, Implementation, and Evaluation	3.00
MPH	745	Organizing and Educating for Health	3.00
		Spring Term credit total: 21.5	

6th Year Professional Phase (Required Advanced Pharmacy Practice Experiences)

All courses in the following table are required.

PHM	610	Acute Care Advanced Pharmacy Practice Experience	5.00
PHM	611	Ambulatory Care Advanced Pharmacy Practice Experience	5.00
PHM	612	Community Practice Advanced Pharmacy Practice Experience	5.00
PHM	613	Institutional Practice Advanced Pharmacy Practice Experience	5.00
PHM	614	Inpatient General Medicine Advanced Pharmacy Practice Experience	5.00
PHM	616 or 617	Elective Advanced Pharmacy Practice Experience	5.00
MPH	798	MPH Capstone	3.00
MPH	799	Public Health Practicum (in lieu of one APPE elective)	3.00
PHM	615	Senior Seminar	2 x 2.50
MPH	750	Public Health Policy, Advocacy, and Leadership	3.00
		P6 Summer through Spring credit total: 44.0	

**** Please note: MPH courses may be taken in a different order than listed here, depending on course offerings each semester.**

Credit and GPA Requirements

Minimum Total Credits: 234.0

Minimum Liberal Arts and Sciences Credits: 68 or 69*

Minimum GPA PharmD Professional: 2.00

Minimum GPA MPH: 3.00

PharmD and MS, Shared Credit Programs

Students in the professional phase of the program (P3) can choose graduate-level courses for electives as part of a Pharm.D. – Master's degree shared credit program. This cost-effective option allows our Pharm.D. students to earn a Master's degree a year or more sooner than would be the case if the degrees were earned back-to-back. The Pharm.D. – Master's graduate will be more versatile and thus more job-competitive with this extra credential, with a built-in second career path as an option. The Pharm.D. degree is received on schedule, after the P-4 year. The Master's degree is either received at the same time (4-year plan) or a year later (5-year plan). The 4-year plan is more cost-effective but quite rigorous; the student is taking 21 credit hours for certain semesters, plus graduate-level electives at the same time as the APPE rotations. Only Pharm.D. students with a cumulative GPA of 3.0 or higher can access the 4-year plan. The 5-year plan allows for a normal course load and is recommended.

Master of Science Degrees coupled to the Pharm.D:

· Master of Science (M.S.) in Drug Regulatory Affairs

· Master of Science (M.S.) in Pharmaceutics: Cosmetic Science

· Master of Science (M.S.) in Pharmaceutics: Industrial Pharmacy

· Master of Science (M.S.) in Artificial Intelligence

To decide if the shared credit Pharm.D. – Master's degree option is right for you, please meet with your academic advisor. For more insight on which Master's program to choose, please meet with the Chair of Pharmaceutical Sciences. Details on the curricular plan for each option can be found at: https://liu.edu/Pharmacy/Programs

Co-Curricular Requirements

The co-curriculum is designed to foster students' personal and professional development and to provide students with opportunities to participate in public service and improve access to health services, health information and care for a broad array of the culturally diverse population in the New York metropolitan area. In doing so, our students will be leading advocates, navigators and providers for the general public and will collaborate with other health professionals and members of the community to facilitate improved access to healthcare and address important health issues in the community. Under the guidance of an assigned mentor, students will document their progress towards achievement of program learning outcomes in a professional development portfolio.

The co-curricular requirements are unique to each professional year. Students are required to log in to specified online platforms and complete an evaluation for each requirement. Additionally, students will complete an annual evaluation

specific to the overall co-curricular experience.

AMSCOP Co-Curriculum Progression Policy:
In addition to completing curriculum requirements, students must also complete all co-curricular requirements. These are outlined in the following table.

Co-Curricular Requirements by Year

Year 3
- Active participation in at least one professional organization (membership + attend at least 50% of organization meetings).
- Participate in at least one elective activity.
- Attend at least one Professional Development Program (PDP).
- Student portfolio.

Year 4
- Participate in at least one activity that qualifies as Educational Outreach, Direct Patient Care Outreach, or Legislative Advocacy.
- Participate in at least one elective activity.
- Attend at least one Professional Development Program (PDP).
- Student portfolio.

Year 5
- Participate in at least one activity that qualifies as Educational Outreach, Direct Patient Care Outreach, or Legislative Advocacy.
- Participate in at least one elective activity.
- Attend at least one Professional Development Program (PDP).
- Student portfolio.

Year 6
- Attend at least two (0.2 CEU) ACPE-accredited live Continuing Education (CE) events.
- Student portfolio.

Additional Information:
- Deadline for completion of portfolio requirements is April 1st (subject to change) an deadline for completion for all co-curricular requirements is April 15th (subject to change).
- Any false documentation violates LIU Pharmacy Student Code of Conduct and will be subject to disciplinary action.
- Activities completed after the deadline will count toward the requirements of the next academic year, if applicable.
- Cases of failure to adequately complete the annual co-curricular requirements will be reviewed by the Director of Co-Curricular Affairs and referred to the Office for Student and Academic and Professional Affairs for appropriate action, which is a hold on course registration and/or to be unenrolled from registered courses for the next academic year; required attendance at a professionalism meeting with a written reflection and a professionalism letter placed in a student file. Upon timely completion of the missed requirement(s), only the registration hold may be removed.
- More information including a calendar of events can be found at the College's Co-Curriculum Website: https://www.liu.edu/Pharmacy/Academic-Programs/PharmD/Co-Curriculum-Committee.

Interprofessional Education

In 2010, the World Health Organization (WHO) defined Interprofessional Education (IPE) as "education that occurs when students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes." This approach fosters teamwork among healthcare providers, equipping them with the necessary skills to deliver coordinated, patient-centered care.

The primary goals of IPE are (1) to prepare students to function effectively in an interprofessional (IP) team, (2) to ensure that students apply learned knowledge, skills, and values in future practice, and (3) to develop professionals capable of providing collaborative, patient-centered care that improves health outcomes.

An IP team consists of members from various healthcare disciplines, including but not limited to pharmacists, physicians, nurses and nurse practitioners, dietitians, physical therapists, occupational therapists, social workers, etc. Each member contributes specialized expertise to optimize patient care through shared decision-making and collaboration.

An interprofessional learning experience prepares healthcare students to work together toward the common goal of enhancing patient safety and healthcare quality. The Accreditation Council for Pharmacy Education (ACPE) requires as a part of the accreditation standard that all PharmD students actively engage in IPE as part of their professional training. According to ACPE standards, all pharmacy graduates must demonstrate the ability to provide entry-level, patient-centered care in diverse practice settings as key contributors to an interprofessional healthcare team. Additionally, ACPE emphasizes that pharmacy students must be exposed to prescribers and other healthcare professionals throughout their education.

The LIU College of Pharmacy has implemented multiple initiatives to ensure that every PharmD student actively engages in meaningful IPE experiences. These initiatives are designed to equip students with the essential skills to collaborate effectively with various healthcare professionals and deliver optimal, patient-centered care.

IPE programs at LIU are diverse and occur throughout the academic year. They range from small-group simulations to large-scale interprofessional events involving multiple health disciplines. Examples of IPE Events at LIU College of Pharmacy:
- Small SIM Lab Simulations: Focus on long-term conditions and involve a small group of students and healthcare professionals working together in a controlled environment.
- Large-Scale Virtual Game-Based Simulations: These simulations involve teams of students and practitioners from up to ten different health professions, allowing for a dynamic, collaborative learning experience that mirrors real-world healthcare settings.

Student Commitment and Participation
- IPE participation is mandatory for all PharmD students.
- Students are required to dedicate 2 to 4 hours per year to IPE activities.
- Preparatory assignments must be completed before each IPE event, which may include:
  - Reviewing clinical guidelines relevant to the topic.
  - Watching instructional videos on best practices.
  - Reading articles discussing case studies and IPE principles.
  - Completing pre- and post-event surveys to assess learning outcomes.

Participation in all assigned IPE events is required for graduation. All students are required to actively participate. The only acceptable reasons for missing a scheduled IPE event include:
1. Personal illness requiring a visit to an emergency department or a physician's office.
2. Death of an immediate family member.
3. Natural disaster declared by a governmental body or LIU that prevents travel.

In the event that one of the abovementioned excuses applies to an absence:
- The student must notify the IPE Office as soon as possible and before the event begins.
- Written documentation (e.g., doctor's note, official record) must be submitted within 72 hours of the missed event.
- If an absence is excused, the student is eligible for a make-up session.

Failure to complete the annual IPE requirement will result in a review by the Office of Interprofessional Education. Cases of non-compliance will be referred to the Office of Student and Academic Affairs, which may impose the following penalties:
- A registration hold preventing enrollment in future courses.
- Unenrollment from all registered courses for the next academic year.
- Loss of academic standing until the IPE requirement is met.

Upon timely completion of the missed IPE requirement(s), the registration hold and/or course unenrollment may be lifted.

Pre-APPE Competencies

PRE-APPE COMPETENCIES

As part of the Accreditation Council for Pharmacy Education (ACPE) Standards (2025), there is a clear expectation that students will develop the comprehensive knowledge base required to be "APPE-ready' and that they will be able to retain, recall, build upon, and apply that knowledge to

deliver quality patient care in a variety of entry level practice settings. Specifically, the College's assessment plan measures student achievement at defined levels of the professional outcomes that support attainment of the education outcomes adapted from COEPA 2022 in aggregate and at the individual student level. The faculty selected the performance competencies and assessment activities after careful consideration of the curriculum. Some of the assessments are embedded within courses and some are held outside of the specific courses within the P5 year. Specific details regarding the assessment days are provided in advance.

Every student must demonstrate competency in each of the assessments prior to the start of APPEs. Students who do not successfully demonstrate competency on the first attempt may be provided with opportunities for remediation/additional attempt(s) during the designated assessment period. Students who fail to pass all competencies before the date when APPE preferences are due will not be issued an APPE schedule. Failure to pass all competencies by the last remediation date offered by the College will prevent students from starting APPEs. The Assisstant Dean of Student Academic and Professional Affairs will determine next steps for students who are unable to pass Pre-APPE competencies on the first attempt and during the remediation exams. Students who are unable to pass Pre-APPE exams are at risk of a delay in graduation.

Milestone Exams (subject to change)

Comprehensive exams will be given between professional years. These milestone progression exams will assess the knowledge and skill acquired during the curriculum and will be used for formative assessment of students.

PROFESSIONAL COURSE DESCRIPTIONS

PHM 300 P-3 Introductory Pharmacy Practice Experience

This course will expose students to the roles and responsibilities of pharmacists in a variety of settings where pharmacy is practiced through participation in on-campus seminars and off-campus visits. The student pharmacist will be expected to visit off-campus locations to observe the practice of pharmacy. Required visits will take place in Community Pharmacy, Hospital Pharmacy, and possibly other practice facilities. In addition to the site visits, the student will participate in programs and seminars geared to help develop an appreciation for the breadth of the profession and develop basic skills required to succeed in the pharmacy program and as future pharmacists. Students will also begin to explore the various professional organizations within the pharmacy profession.

Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 0.50
Every Fall

PHM 310 Pathophysiology/Immunology

This course covers the fundamental mechanisms, etiology, pathogenesis, and manifestations of common diseases seen in today's world. Students will become familiar with the predisposing factors and pathological processes that lead to disease at the molecular, cellular, organ, and whole body levels. Topics include an introduction to the immune system in health and disease, concepts of microbial pathogenesis and the responses of the host to infection; allergy and hypersensitivity; tissue graft rejection, clinical immunosuppression, the immune system vs. cancer, autoimmune diseases, and congenital and acquired immuno-deficiencies. Students are also exposed to the basic morphologic and functional changes of major disease processes in cardiovascular, respiratory, renal, digestive and endocrine, neurologic, and musculoskeletal systems. Throughout the course, students will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice.

At the end of this course, students will be able to describe and explain the pathophysiological mechanisms of major human diseases, and apply this knowledge when learning about the pharmacotherapy of major disease states.

Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 3
Every Fall

PHM311 Pharmaceutics I: Pharmaceutical Calculations

This course is designed to enable students to perform calculations requisite for the study and practice of pharmacy. The course will also provide a basic understanding of statistics, necessary for the students' understanding of pharmaceutical and medical literature. After completing the course, students will be able to interpret prescription orders and perform all calculations necessary for the preparation of stock solutions and extemporaneous products. The course format will consist of lecture and recitation. The students will also be provided with problem sheets and text assignments that they must work through on their own. It is believed that diligent and persistent practice is the best way to achieve proficiency and mastery in problem solving.

Co requisite: PHM 312; Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 2
Every Fall

PHM312 Pharmaceutics II: Basic Theories in Pharmaceutics

This course is designed to provide the students with the basic principles and application of physical chemistry in pharmacy. It provides the bases for understanding the chemical and physical phenomenon that govern the in vivo and in vitro actions of pharmaceutical products. This course serves as the foundation for the later study of pharmaceutical manufacturing, dispensing, and biopharmaceutics and pharmacokinetics.

Following completion of this course, students will be able to discuss the principles of physical chemistry such as solution theory, diffusion and dissolution, rheology, and kinetics as applied to pharmaceutical systems.

Co requisite: PHM 311; Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 2
Every Fall

PHM313 Biochemistry

This course provides the biochemical foundation necessary for students to understand the basis of pharmacotherapeutics. Topics include the structure and function of macromolecules, membrane structure and receptor signaling, biomolecular interactions, and the mechanisms of enzyme action. This is followed by the metabolism of carbohydrates, lipids, amino acids, nutrition, nucleotides, and the control of metabolic processes. Clinical correlations are provided throughout the course, and each student will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice due to the use of various active learning techniques.

After completing this course, the student will be able to apply the biochemical principles that are requisite to the understanding of immunology, medicinal chemistry, and pharmacotherapy.

Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 3
Every Fall

PHM314 Pharmacy Profession and Health Care System

Over the past few decades, pharmacy as a profession has evolved dramatically. This evolution of the pharmacist's role in healthcare has been in sync with several other changes in the health care system. This 3 credit course introduces the student to the dynamic and complex changes that have occurred in the U.S. health care system with an emphasis on the evolution of pharmacists' roles in the provision of health care products and services and pharmacy's relationships with other healthcare providers in the health care system. It will detail the role of the other healthcare professionals and various healthcare settings in which pharmacists provide care currently and may be positioned to provide in the future.

Each class session will require students to think critically and communicate in small as well as large group settings to discuss the evolving nature of the pharmacist's role and the way in which future pharmacists can make a contribution to improving a patient's quality of life and safety.

Following completion of this course, students will be able to critically evaluate and discuss orally and in writing the historical development of the pharmacy profession and how it currently fits in the healthcare system and plays an important role in improving patient safety and patients' quality of life. Students will be able to advocate the professional contributions that pharmacists make in reducing healthcare costs, improving patients' quality of life and patient safety.

Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 3
Every Fall

PHM315 Pharmacy and Society

The role of pharmacists in today's society is becoming increasingly complex. While once pharmacists were seen as medication dispensers, pharmacists now play an influential role in providing healthcare services to improve patient outcomes and patient safety, healthcare policy and financial policies. Pharmacists are now among leaders who shape national and international landscape of healthcare services. Future pharmacists need to become abreast of issues related to healthcare services where their leadership and advocacy will be primarily needed.

Pre requisite: Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 2
Every Fall

PHM320 Molecular Biology

The biological sciences play a growing role in our understanding of disease and the manner in which they should be treated to ensure optimal outcomes for the patient. The goal of this course is to ensure that students have a broad understanding of the basic principles of gene expression, gene replication, and molecular interactions important to biological processes. Topics include mechanisms of DNA/RNA/protein synthesis and function,

gene transcription and translation, gene expression and regulation, cell cycle regulation, and molecular biology of bacteria and viruses. Students are also introduced to genetic recombination, DNA biotechnology, and diagnostic molecular biology techniques utilized in the clinical laboratory. Throughout the course, students will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice.
Upon completion of this course, students will be able to explain the principles behind DNA, RNA, and proteins synthesis and regulation. Students also will be able to identify the patient care implications of their newfound knowledge. Student will be able to educate other health care professionals and patients about the importance of DNA sequencing and profiling in improving patient outcomes.
Pre-Requisite of PHM 313 is required
Credits: 2
Every Spring

PHM321 Principles of Pharmacology, Medicinal Chemistry and Toxicology
This course introduces students to many of the basic principles surrounding biological science disciplines such as pharmacology, medicinal chemistry, and toxicology. Students will, for example, begin to develop competencies in such areas as pharmacokinetics, pharmacodynamics, the theory of structure activity relationships, and toxicology. The overall course goal is to have the students develop an understanding of the scientific concepts needed to understand and ultimately provide rational drug therapy for individual patients.
Topics include basic pharmacokinetic parameters and concepts, drug metabolism and drug-drug interactions; dose-response relations; toxicity of chemical and pharmacological agents. Students are also introduced to the physiologic and pathophysiologic factors involved in drug absorption, distribution, metabolism and elimination, determinants of variability in drug responses, inter- and intra-patient variability in pharmacokinetics/ pharmacodynamics, and drug interactions. By the end of the course, students will be able to use basic pharmacokinetic parameters to begin to determine appropriate doses and dosages, and develop/assess dose-response curves to determine relative efficacies and potencies. Student will also be able to explain the rationale for the development of adverse events seen in patients based on an understanding of toxic metabolites and drug-drug interactions. Throughout the course, students will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice by the use of case studies, responses to questions posed by faculty members, and other active learning techniques.
Pre-requisites of PHM 310 and PHM 313 are required.
Credits: 2.50
Every Spring

PHM322 Pharmacy Practice Laboratory I
This course is designed to prepare students for their introductory pharmacy practice experiences and provides students with an introduction to the principles of and skills required for contemporary pharmacy practice. Specifically, it reviews the various components of the prescription dispensing process, including the initial patient encounter, the patient profile review, preparing and checking the dispensed medication, and counseling the patient. An emphasis will be placed on the laws and regulations that govern this process (e.g., elements required on the prescription and pharmacy label, electronic prescribing, controlled substance laws, patient counseling requirements). Small group teaching methods are employed to inform and prepare students for the simulated pharmacy practice scenarios to be held in the Integrated Pharmaceutical Care Laboratory. Laboratory sessions will allow students to develop a structured operational approach to the technical and legal aspects of pharmacy practice by accurately accepting, processing, and checking prescriptions to meet a patient's needs, gathering pertinent patient information, and providing information to a patient about prescription medications or products available over-the-counter. This course will prepare students to perform basic functions in community pharmacy practice.
Prerequisites: PHM 311
Co-requisites: PHM 325, PHM 326
Credits: 1
Every Spring

PHM323 Pharmaceutics lll: Biopharmaceutics and Pharmacokinetics
This course provides the students with the basic principles and applications of pharmacokinetics. In order for a medication to be therapeutically successful, it must: enter the blood circulation through an absorption process, be distributed to the appropriate site of action, and finally be eliminated through a chemical (metabolism) or physical (excretion) process. Pharmacokinetics studies and quantifies mathematically these processes in order to optimize the actual use of medications (e.g.: selection of the most appropriate dose, formulation, frequency of administration etc.). Following completion of this course, students will be skillful with the principles of linear and non-linear pharmacokinetics, biological half-life, volume of distribution, and bioavailability. Students will be able to determine optimal dosage forms for specific situations and appropriate dosage regimens. The tools and principles acquired with this course are fundamental for the comprehension of pharmacotherapeutics and the practice of pharmaceutical care.
Prerequisites: PHM 311 and PHM 312
Credits: 3
Every Spring

PHM324 Biostatistics
This course is designed to introduce students to biostatistical concepts and methods commonly encountered by pharmacists. Biostatistics helps clinical researchers, clinicians and health policy makers to identify real treatment effects and associated contributions. A complete understanding of biostatistics is required to successfully evaluate scientific literature and draw conclusions for applicability to patient care scenarios. After completing the course students will be able to carry out simple statistical tests, apply descriptive and inferential statistics in practice, select the appropriate statistical procedure to answer research questions, explain why they made that decision based upon statistical evidence and interpret clinical studies correctly. They will be familiar with statistical programs (such as Excel or Statistical Package for the Social Sciences- SPSS) to solve statistical problems and interpret statistical outputs. They will be able to explain what the results of the statistical tests mean and draw conclusions.
Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 2
Every Spring

PHM325 Introduction to Pharmacy Practice
This course is designed to introduce the student pharmacist to the pharmacists' patient care process, a model used to deliver patient-centered care in collaboration with other members of the health care team; care that is designed to optimize patient health and medication outcomes. The principles involved in this model, including data collection, assessment, planning, implementation, and monitoring of the patient, will be introduced. As a first step to achieving proficiency in the patient care process, students will learn how to effectively collect and analyze patient preferences and beliefs, subjective and objective information about the patient's health, use of medications and/or complementary and alternative therapies, and pertinent results of laboratory tests and diagnostic procedures. In addition, students will learn about principles of adverse drug reactions and drug interactions, therapeutic drug monitoring, and medication reconciliation, the understanding of which is integral to identifying medication-related problems and planning, implementing, and monitoring drug therapy. Since the patient care process is supported by the efficient use of information resources, drug information retrieval skills will be introduced. Underpinning this will be principles of documentation, and collaboration and communication with other health care providers and the patient. Through small group and active learning techniques students will have an opportunity to apply concepts covered during lecture.
Co-req: PHM 326.
Course open to students with 3rd Year Standing in Pharm.D. Program
Credits: 3
Every Spring

PHM326 Principles of Physical Assessment and Medication Administration

This course covers topics fundamental to patient care including the provision of collaborative drug therapy management, pharmacists as immunizers, and other expanded patient-care roles that pharmacists play in today's health care system. An emphasis is placed on the skills required to engage in medication therapy management services. These skills include the collection of objective data such as is required during physical assessment for therapeutic monitoring, screening for drug induced diseases, the evaluation of adverse events, and the administration of pharmaceuticals and vaccines. Laboratory sessions provide students with an opportunity to work individually and in small groups to engage in simulated performances of physical assessment and medication administration. After completing the lecture and skills laboratory components of this course the student will be able to obtain medical histories, screen patients for common medical problems such as hypertension, diabetes and a variety of oncological disorders, detect adverse drug reactions and monitor a patient's therapies through a review of systems and physical examination. Students will also become familiar with administering intramuscular and subcutaneous injections and counseling patients on the correct technique for administration of ophthalmological and otic preparations, inhaler devices, and devices for nebulization.
Course open to students with 3rd Year Standing in Pharm.D. Program
Co-requisites: PHM 322, PHM 325
Credits: 2
Every Spring

PHM400 Community Practice Introductory Pharmacy Practice Experience

This introductory practice experience course will expose the student to the patient care, administrative, distributive, and overall practice of a contemporary community pharmacy. The student pharmacist will engage in activities related to key elements involved with dispensing prescriptions such as interpreting a patient profile, taking an oral prescription, processing electronic prescriptions, performing applicable calculations, and preparing and dispensing products. Students will also assist with resolving insurance issues. Additionally, they will participate in available activities involving communication with various constituents including patients and caregivers, prescribers and their agents, and other healthcare professionals.
Prerequisites: PHM 300, 310, 311, 312, 313, 314, 315, 321, 322, 323, 324, 325 and 326
Credits: 4
Every Summer

PHM410 Human Genetics

Human Genetics is the study of inheritance and genetic variation in humans. It encompasses various fields including genomics, cytogenetics, molecular and quantitative genetics. The goal of this course is to ensure that students have a broad understanding of the basic principles of these fields and serve as a preparatory course for Pharmacogenomics, Personalized and Individualized Medicine. Topics include mechanisms of DNA/RNA/protein synthesis and function, gene transcription and translation, gene expression, meiosis, mutations, allele frequency, phenotypes and genotypes, and basis for common genetic disorders. Students are also introduced to methodologies used to study gene expression and profiling. Throughout the course, students will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice. Upon completion of this course, students will be able to explain the principles behind inheritance, mutations, and proteins synthesis and regulation. Students also will be able to identify the patient care implications of their new-found knowledge. Student will be able to educate other health care professionals and patients about the importance of inheritance, polymorphisms and profiling in improving patient outcomes.
Pre requisites: PHM 313 and PHM 320
Credits: 2
Every Fall

PHM411 Modular Organ Systems Therapeutics Sequence (MOST I)

This is the first of the eight-course sequence that combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy to allow students to learn the mechanism of drug action, effects of medications in health and disease, and rational therapeutics for patients suffering from common disease states. Following brief introductory material, the series of courses follows an organ-system approach to disease states and their appropriate treatment. This course in the sequence includes discussion of common types of anemia, fluid and electrolyte abnormalities, kidney diseases, acid base disorders, and Women's Health (Gonadal Hormones, Contraception, Menopause, Pregnancy & Lactation, Infertility, Osteoporosis).
Pre-requisites: PHM 310, PHM 313, PHM 321, PHM 322, PHM 323, PHM 325, and PHM 326
Co-requisites: PHM 414 and PHM 415
Credits: 4
Every Fall

PHM412 Modular Organ Systems Therapeutics Sequence (MOST II)

This is the second of an eight-course sequence that combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy to allow students to learn the mechanism of drug action, effects of medications in health and disease, and rational therapeutics for patients suffering from common disease states. Following brief introductory material, the series of courses follows an organ-system approach to disease states and their appropriate treatment. The second course in the sequence includes discussion of hyperlipidemia, hypertension, cardiovascular conditions, cerebrovascular accident, venous thromboembolism, diabetes mellitus, and obesity.
Pre-requisites: PHM 310, PHM 313, PHM 321, PHM 322, PHM 323, PHM 325, and PHM 326
Co-requisites: PHM 414 and PHM 415
Credits: 4
Every Fall

PHM414 Drug Information and Literature Evaluation

This course is designed to introduce students to the knowledge, concepts, and skills involved in addressing drug information needs that arise in professional practice, including, analysis of the question, conducting a systematic search, and formulating and communicating a response. A significant portion of the course will focus on ways to evaluate the biomedical literature with respect to trial design, methodology, statistical analysis of results, and clinical relevance of findings. The course concludes with clinical applications of drug information skills that require students to judge the merit of various types of biomedical literature so as to arrive at an evidence-based pharmacotherapy decision. The critical thinking and problem solving skills of students will be developed as they are challenged with various active-learning strategies in lecture and recitation/small-group learning sessions that focus on the application of drug information and literature evaluation skills in the delivery of patient-focused care.
After completing this course students will be able to retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information and counseling to patients, their families or care givers, as well as other health care providers.
Pre-reqs: PHM 324 and 325
Co-reqs: PHM 411, 412, 415
Credits: 3
Every Fall

PHM 415 Pharmacy Practice Laboratory II

This pharmacy practice laboratory is the second segment of a four-part laboratory series aimed at teaching, reinforcing, and assessing skills required to practice safely and effectively in a variety of pharmacy settings. Students will receive opportunities to practice, apply, and integrate information and skills acquired in previous and concurrent coursework in a simulated patient care environment.
Pre requisites: PHM 322, PHM 325, and PHM 326
Co requisites: PHM 411, PHM 412, and PHM 414
Credits: 1
Every Fall

PHM420 Principles of Health Behavior and Patient-provider Communication

To deliver pharmaceutical care effectively, pharmacists need to understand patient behaviors and communicate with patients and other members of the health care professionals through different modalities, e.g., verbal, written, graphic, and electronic. In order to conform to OBRA '90

(federal regulation that has implications for pharmacists), and more recent regulations regarding pharmacy practice, requiring consultation with patients in a variety of specific situations, pharmacists must also possess the ability to address (both in writing and verbally) patients, community, senior, educational and religious groups who desire medication and health information, as well as share information, ideas and solutions with other pharmacists and health professionals. This course is designed to help students achieve competencies in the areas of understanding, influencing and modifying patient behaviors, effective verbal and written communication and engaging in professional behaviors that help improve patient quality of life and patient safety. This course is also the designated Writing Intensive (WI) course and involves students writing and presenting papers on topics related to effect of patient-provider communication on patient health outcomes. Recitation sessions provide the students with an opportunity to counsel patients while utilizing sound principles of communicating with patients in a variety of context. The recitation periods allow the students to enhance their communication and patient management skills by conducting one-on-one counseling sessions and get feedback from peers.
Following completion of this course, students will be able to effectively communicate (written and oral) and create patient care plans for improving compliance and healthy behaviors.
Student must have 4th year standing in order to register for this course.
Credits: 3
Every Spring

PHM421 Pharmaceutics IV: Dosage Forms and Principles of Extemporaneous Compounding
An important component of drug therapy is the selection of the dosage form. Some of the factors considered in the selection process include patient factors, (e.g., age, weight, gender), the route of administration, design of the dosage form, socioeconomic factors, concurrent drug administration, and disease state. This course deals with the basic and applied scientific principles used in the design, preparation, storage, packaging, stability, incompatibilities, dispensing and use of polyphasic systems, including suspensions, and emulsions, of sterile parenteral, otic and nasal products and of total parenteral nutrition are necessary considerations of dosage form selection.
Pre requisites: PHM 311, PHM 312
Co requisite: PHM 422
Credits: 3
Every Spring

PHM422 Pharmaceutical Compounding
Students will gain the expertise in learning how to compound extemporaneous liquid dosage forms such as syrups, elixirs, suspensions, lotions ophthalmic and nasal solutions, intravenous preparations, and parenteral and enteral nutritional preparations. Lectures and videos will be used to give students an overview of the available volumetric and gravimetric compounding filling apparatus and equipment used to compound simple solutions to complexed TPN and oncology preparations. Fundamental principles of USP 795, 797 and USP 800 used in preparing both sterile and nonsterile preparations will be presented. The course provides the student with the necessary knowledge, tools and training to integrally fit and lead, when necessary, in providing extemporaneous medications and treatment protocols to patients. The knowledge gained in this course will also train pharmacists on selecting the appropriate therapeutic agents, supportive excipients and necessary devices, to assess and ensure the stability and safety of compounded extemporaneous product and to appropriately labelling these products for both institutional and home settings. This course similarly provides students to be cognizant for the need of the quality APIs and excipients used, to ensures that preparations compounded are stable, compatible, safe, effective and manufactured in accordance with GMPs.
Pre requisites: PHM 311, PHM 312
Co requisite: PHM 421
Credits: 1
Every Spring

PHM423 Pharmacy Practice Laboratory III
Pharmacy Practice Laboratory III is the third course of a four-part laboratory series aimed at teaching, reinforcing, and assessing skills required to practice safely and effectively in a variety of pharmacy settings. Students will receive opportunities to practice, apply, and integrate information and skills acquired in previous and concurrent coursework in a simulated patient care environment.
Pre requisites: PHM 322, 411, 412, 414 & 415
Co requisites: PHM 424 and PHM 425
Credits: 1
Every Spring

PHM424 Modular Organ Systems Therapeutics Sequence (MOST III)
This is the third of an eight-course sequence combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy in order to provide the student with an integrated approach to understanding the molecular mechanisms of drug action, the effects of medications on the body, and rational therapeutic approaches to important disease states. An emphasis is placed on the most common conditions for which pharmacists and student pharmacists are exposed to when providing patient care. In general, the students learn pharmacologic principles first and then learn rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice. The course focuses on gastrointestinal disorders, cough/cold/allergy, asthma and chronic obstructive pulmonary disease, and behavioral aspects of smoking cessation, and thyroid and adrenal disorders.
Pre requisites: PHM 321, 325, 326, 414 & 415
Co-requisites: PHM 423
Credits: 3
Every Spring

PHM425 Modular Organ Systems Therapeutics Sequence (MOST IV)
This is the fourth of an eight-course sequence that combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy to allow students to learn the mechanism of drug action, effects of medications in health and disease, and rational therapeutics for patients suffering from common disease states. Following brief introductory material, the series of courses follow an organ-system approach to disease states and their appropriate treatment. This course in the sequence includes discussion of common sleep disorders, seizures, common CNS disorders in elderly, smoking cessation, psychiatric disorders, headaches, migraines, alcohol and substance abuse disorders. In general, the students learn pharmacologic and medicinal chemistry principles first and then learn rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice.
Pre requisites: PHM 321, 325, 326, 414 & 415
Co-requisites: PHM 423
Credits: 3.50
Every Spring

PHM 430 Spanish Language and Culture for Pharmacists
The focus of this course is to combine didactic, active classroom discussion, team-based learning, creative exercises, and community-based learning to build Spanish cultural and language competencies in pharmacy practice. There is an imminent demand for Spanish-speaking and culturally competent health care providers as such need is outpacing population growth. The ability to relate, and communicate with Spanish-speaking patients are vital in developing pharmacy students into future pharmacists who can address and provide quality health care for an increasingly diverse patient population and to optimize patient outcomes. The purpose of this course is to prepare pharmacy students to learn, practice, and gain an appreciation of ethnic, cultural, and language dimensions when interacting with Latinx patients and developing drug therapy plans. A didactic portion of the course will cover vocabulary and language of major groups of pharmaceutical treatment products. Students are expected to perform assigned pre-readings and be prepared to discuss implications and perspectives on the readings in class. Projects will include creating a public health related poster and a team-based presentation of the most prevalent local Latinx ethnicities. In addition, students will complete

weekly mini assignments of building a word bank of colloquial words and phrases, showcasing Latinx complementary alternative medicines and practices, and conducting and reflecting on one interview of a Latinx patient or health care provider. Students will be assessed on and build competency in counseling medications in Spanish as well as gain an appreciation of and apply the use of health-care related Spanish language in the community
Credits: 3
On Occasion

PHM 440 Introduction to Medical Writing and Communication
Medical writing involves the development of written medical, scientific, and health information for target audiences. This includes the preparation of manuscripts for publication, the development of educational content for patients and health care practitioners, and the preparation of health promotional content, regulatory documents, as well as other related materials. Possessing the skills necessary to effectively communicate scientific information to a target audience is critical for pharmacists who are often engaged in such activities. As such, the aim of this elective course is to provide students with the skill set necessary to be effective communicators of scientific information.
Pre-requisites: PHM 324 and PHM 414
Credits: 3
On Occasion

PHM 472 History of Pharmacy
The goal of the history of pharmacy course is to give students an introduction to the history of their profession and the origins of the medicines that have been and are being dispensed. The information presented will help provide students with a general chronology of the development of the profession of pharmacy, its literature and the tools of the trade. In addition to understanding the historical foundations of pharmacy, which inform the present, and guide the future, students will learn that pharmacy is part of a bigger picture of the social, cultural, and economic environment. The course will provide a historical analysis covering over 6,000 years. Information will be presented in chronological order and follow the development of Western pharmacy and therapeutics. It will flow from prehistory to Egypt, Greece, Rome, and the Arab-Jewish periods to Europe. Much of the course time will focus on the American experience, 1600-2000. The education and training of neophyte pharmacists, discovery of new drugs and dosage forms, institutions including guilds, associations, and regulatory bodies, will be discussed and related to the present state of the profession. Development of medicines and pharmacy in the East will give students insight into how religion and various worldviews created different approaches to healing. Throughout the course, pharmacotherapy will be a key element of the history of pharmacy. From the 1630s, when quinine was proven to prevent and cure a disease to the over 100 effective medicines of the 20th century the impact of these medicines will be covered in some depth. In addition to lectures (including those given by notable guest lecturers), four hands-on labs will be devoted to preparing historical dosage forms and formulas that will help bring the history of pharmacy to life. Written prescriptions from 1880 to 1970 will be discussed as examples of how pharmacotherapy rapidly changed during the period. Students will also have the challenge of reading 19th and 20th century prescriptions.
Credits: 3
On Occasion

PHM 473 Introduction to the Pharmaceutical Industry: Insights and Opportunities for Pharmacists
This course is designed to provide pharmacy students with an overview of the pharmaceutical industry. In particular, the student will gain an understanding of the discovery, development and marketing of new pharmaceuticals, as well as an appreciation for the role that various company departments and functions play in providing support for pharmaceuticals products. A secondary goal is to raise the student's awareness of the role of the pharmacist in the pharmaceutical industry.
A pre/co-requisite of PHM 4## level courses is required.
Credits: 3
On Occasion

PHM 475 Kidney Pharmacotherapy: A Case-Based Approach
The case-based kidney (renal, nephrology) pharmacotherapy course allows students to apply concepts for the pharmacotherapy management of common kidney diseases including application of important clinical practice guidelines and major targeted trials. This course is intended for pharmacy students to practice and enhance advanced knowledge and clinical decision-making skills, and prepare pharmacy students for post-graduate training and clinical practice. It provides opportunity for students to practice with concepts that are seen in real-world clinical settings. Structure of this course will comprise of patient cases and complex patient profiles in order to facilitate understanding and promote complex decision-making. Workshops/cases/patient profiles discussions will allow students to develop many skills in the areas of kidney pharmacotherapy topics.
Prerequisites: PHM 411, 412, and 414.
Credits: 3
On Occasion

PHM 477 Cannabis: Pharmacology, Therapy, and Controversy
This course will explore current research on the endocannabinoid system and its role in maintaining homeostasis. It will also focus on the many dosage forms of cannabis and the effects of these forms on health and wellness. These dosage forms will include the application of cannabinoid products approved for disease states and conditions such as Alzheimer's disease, multiple sclerosis, epilepsy, glaucoma, and chemotherapy-related nausea. Students will also explore the historical and political issues that resulted in the classification of cannabis as a Schedule I controlled substance. The classroom sessions will include interactive learning exercises and case studies.
Credits: 3
On Occasion

PHM 478 Introduction to Managed Care Pharmacy Elective
The introduction to managed care pharmacy elective course provides an introduction to the concepts of pharmacy practice as it relates to managed care and the important role of pharmacists in P& T committees to assure quality and cost management within an organizational structure such as hospitals and pharmacy benefit managers. The course will cover broad managed care concepts including the history and evolution of the US healthcare system, European and Socialized Systems, and then focus on the roles of a pharmacist in a managed care environment and the process by which a typical P and T Committee determines drug selection for formularies. This includes such factors as clinical efficacy, cost, rebates, utilization, benefit plans and prescribing behaviors. Recognition of different managed care models including the VA system, hospitals, insurers, staff model and open access HMO's, ACOs, PBM's, and mail order companies. By course completion, the student will obtain knowledge of the dynamics and application of managed care.
Credits: 3
On Occasion

PHM 479 Advanced Topics in Gastroenterology and Nutrition Support
Pharmacy practice in nutrition support and gastroenterology impacts a diverse patient population, encompassing many different disease states and age groups. In this elective course, students will build upon their prior coursework and enhance their knowledge regarding pharmacologic and nutrition support management of patients with various gastroenterological disorders and nutrient deficiencies. Students will gain knowledge in the fundamentals of nutrition support pharmacy and gastroenterological pharmacotherapy and apply this information to real-world patient cases. Current guidelines, best practices, and clinical trials will be explored. This course is designed to provide students the chance to practice and enhance their clinical decision-making skills and
will prepare students for clinical pharmacy practice and post-graduate training in these areas. Students will learn through interactive case activities and groupwork.
PHM 411 Prequisite; PHM 421 and 424 Co-Requisties

Credits: 3
On Occasion

PHM500 Institutional Practice Introductory Pharmacy Practice Experience
This Introductory Pharmacy Practice Experience will provide the student with an opportunity to gain an understanding of what is involved in the provision of pharmacy services within an institutional setting. Utilizing the knowledge and skills obtained in the didactic and laboratory settings at the college, the student pharmacist will participate in distributive, administrative, and clinical activities commonly performed by pharmacists who work in this setting. Specifically, the student will participate in the unit dose distribution system (using manual and/or a robotic system), prepare intravenous admixtures, respond to queries posed by health care professionals, utilize the patient profile and other computerized systems in the hospital/medical center to perform and document patient-care activities, and procedures unique to hospital practice. The student may have an opportunity to attend hospital or department meetings, and get involved in hospital projects such as nursing unit inspections and medication utilization reviews.
Prerequisites: PHM 300, 310, 311, 312, 313, 314, 315, 321, 322, 323, 324, 325 and 326. Student must have 5th year standing in order to register for this course.
Credits: 4
Every Summer

PHM510 Health Care Informatics
Informatics is commonly defined as the use of computers to manage data and information. Medical informatics, also known as health informatics, is a more specific application of these tools and techniques toward endeavors related to the infrastructure, development and delivery of optimal healthcare. Pharmacy informatics is the nexus between improving the medication use process through informatics, and this topic has taken on unprecedented importance in today's contemporary pharmacy practice. Taken together, we come up with the term health care informatics. Thus it is important that pharmacy students possess and conceptualize within the framework of the medication use process the knowledge and skills of healthcare informatics.
This course will provide a primer on the use of automation systems (e.g., electronic health records, robotics) that support the medication use process. Students will gain an understanding of how biomedical data are acquired, stored and used, as well as the ethical considerations that accompany this process. An emphasis will be placed on the role of informatics in assisting clinicians in assuring, through decision support technologies, optimal medication use and quality.
Students will develop their critical thinking and problem solving skills as they engage in active learning exercises designed to prepare them for developing, evaluating, using, and maintaining health care information systems.
Student must have 5th year standing in order to register for this course.
Credits: 2
Every Fall

PHM511 Pharmaceutics V: Dosage Forms and Principles of Extemporaneous Compounding
An important component of drug therapy is the selection of the dosage form. Some of the factors considered in the selection process include patient factors, (e.g., age, weight, gender), the route of administration, design of the dosage form, socioeconomic factors, concurrent drug administration, and disease state. This course deals with the basic and applied scientific principles used in the design, preparation, storage, packaging, stability, incompatibilities, dispensing and use of solid and semi solid dosage forms, including dermal and transdermal product, powders and granules, capsules, tablets, suppositories, metered dose inhalers, dry powdered inhalers, nebulizers, rate-controlled and targeted drug delivery systems.
Pre-reqs: PHM 311, 312 & 421
Co-reqs: PHM 512
Credits: 3
Every Fall

PHM512 Compounding Laboratory II
This is the second of a two-course sequence consisting of two to three hour laboratories of hands-on practice in compounding prescriptions of products not commercially available. Students will gain expertise in compounding extemporaneous dosage forms such as syrups, elixirs, emulsions, suspensions, lotions ophthalmic and nasal solutions, intravenous preparations and TPN preparations. The course also introduces the students to the concepts of home infusion therapy and gives them an opportunity to practice preparing total parenteral nutrition admixtures. The objective of the course is to provide pharmacy students with a unique opportunity to become competent in preparing extemporaneous products and to practice their chosen time-honored profession. As compounding pharmacy continues to grow, it will provide additional pharmacists with the opportunity to use their innovative skills to solve patient problems. Laboratory hours will ensure that students properly interpret prescriptions, and employ actives and excipients that are appropriate for any given dosage form. The course will allow students to become cognizant of the quality of drugs, excipients and other additives in terms of their stability, compatibility and, when necessary, sterility. Students will be fully exposed and competent in the compounding techniques commensurate to the complexities of 21st century compounding.
Pre requisite: PHM 422
Co Requisite: PHM 511
Credits: 1
Every Fall

PHM 513 Pharmacy Practice Laboratory IV
Pharmacy Practice Laboratory IV is the final segment of a four-part laboratory series aimed at teaching, reinforcing, and assessing skills required to practice safely and effectively in a variety of pharmacy settings. Students will receive opportunities to practice, apply, and integrate information and skills acquired in previous and concurrent coursework in a simulated patient care environment.
Pre requisite: PHM 423, 424, 425
Co requisites: PHM 516 and 517
Credits: 1
Every Fall

PHM515 Pharmacoeconomics and Pharmacoepidemiology
In the past decade, pharmacists have come to be known as the medication experts of the health care system. Pharmacoepidemiology and pharmacoeconomics are research fields that address the effects of medication use in populations. Naturally, it is expected that pharmacists have the requisite knowledge of the principles of pharmacoepidemiology and pharmacoeconomics. This course is designed to teach students about the different study designs and ratios used in different pharmacoepidemiology studies, confounders and biases affecting these studies and their results and how to conduct high-quality epidemiologic research that directly addresses both methodological and substantive questions. Students will also gain an understanding and expertise in utilizing various pharmacoeconomic formulas and ratios to make decisions about which drugs to be included in the formulary. Active learning strategies will be utilized. Following completion of this course, students will be able to critically evaluate pharmacoepidemiological and pharmacoeconomic studies and make decisions about adapting the results of these studies in their practice. Students will be able to calculate ratios utilized in pharmacoepidemiological and pharmacoeconomic studies and provide recommendations related to medication use in populations.
A prerequisite of PHM 324 and 325 is required
Credits: 2
Every Fall

PHM516 Modular Organ Systems Therapeutics Sequence (MOST V)
This is the fifth of an eight-course sequence combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy in order to provide the student with an integrated approach to understanding the molecular mechanisms of drug action, the effects of medications on the body, and rational therapeutic approaches to important disease states. An emphasis is placed on the most common conditions for which pharmacists and student pharmacists are exposed to when providing patient care. In general, the students learn pharmacologic principles first and then learn

rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice. This course focuses on infectious diseases.
Pre-requisites: PHM 321, 325, 326, 414, 423, 424 & 425
Co-requisites: PHM 513
Credits: 2.50
Every Fall

PHM 517 Modular Organ Systems Therapeutics Sequence (MOST VI)
This is the sixth of an eight-course sequence combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy in order to provide the student with an integrated approach to understanding the molecular mechanisms of drug action, the effects of medications on the body, and rational therapeutic approaches to important disease states. An emphasis is placed on the most common conditions for which pharmacists and student pharmacists are exposed to when providing patient care. In general, the students learn pharmacologic principles first and then learn rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice. The course focuses on the following topics in infectious diseases: HIV, viral hepatitis, fungal and opportunistic infections, sexually transmitted diseases (STDs), tuberculosis, infections to immunocompromised patients, and sepsis.
Pre-requisites: PHM 321, 325, 326, 414, 423, 424 & 425
Co-requisites: PHM 513
Credits: 2.50
Every Fall

PHM 518 Introduction to Research
This course will provide a basic and broad overview of different areas of research ranging from basic sciences, pharmaceutics, clinical practice, and social administrative sciences. Students will learn about the different types of research done at LIU, learn the basics of experimental design, and propose an original research project. The course integrates didactic lecture material, laboratory observations, and in-class assignments over the semester. Students will work in small groups to develop an original research proposal. The student teams will present the proposal to their peers and faculty. This course is intended to prepare students for potential continuation of the research experience and to increase student awareness of research opportunities at LIU.
Student must have a 4th or 5th year standing in order to register for this course.
Credits: 3
On Occasion

PHM 519 Addiction and Substance Use Disorders
This course is designed to provide students with an overview of the principles of addiction medicine and Substance Use Disorders (SUDs). At the end of this course, students will be able to describe non-pharmacological and pharmacological treatments for various SUDs. While the emphasis of the course will be on opioid use disorders, the course will discuss amphetamine, alcohol, cocaine, and nicotine use disorders. Students will understand the societal impact of SUDs and describe the various roles pharmacist plays in SUDs.
Student must have a 4th or 5th year standing in order to register for this course.
Credits: 3
On Occasion

PHM521 Practice Management
The healthcare system in the United States is changing rapidly. Pharmacists and their role in the healthcare system are at the epicenter of this change. Thus, it is imperative that future pharmacists learn how to handle the change in this rapidly evolving healthcare system. This course will help students acquire knowledge and skills required to excel in the areas of entrepreneurship, resource management, and business operations pertaining to pharmacy practice.. Principles from the managerial sciences such as business management, human resource management etc., will be applied to pharmacy business operations and patient care services. By the end of the course, students should be able to analyze and evaluate plans for financially sound patient care services, identify and solve problems involving staffing requirements, apply human resource management tools to resolve issues, and evaluate the financial viability of a pharmacy business. The recitation will complement the lectures with hands on management science activities.
Student must have 5th year standing in order to register for this course.
Credits: 2
Every Spring

PHM522 Public Health and Patient Safety
Increasingly, members of the health professions, health policymakers and the American public appreciate the importance of disease prevention and improvement of population health. The release of the document, Healthy People 2020 and national events such as the September 11 attack and the hurricane Katrina disaster have brought to public attention the need for a network of different health care professionals who can effectively respond to public health threats and improve population health. Pharmacists are one of the most accessible health care professionals to the public and, therefore, can significantly affect population health. Therefore, in addition to their conventional role of delivering optimal pharmacotherapy to individual patients, it is important for pharmacists to develop skills to become effective public health providers and improve population health.

The role of the pharmacist in public health is to be able to assess the health needs of populations and to promote health improvement, wellness, and disease prevention in cooperation with patients, communities, at-risk populations and other members of an interprofessional team of health care providers. At the completion of this course, students will be able to design and evaluate initiatives to promote public health such as: (1) improve access to health care and reduce health disparities, (2) increase the quality of community based programs, (3) use communication strategies to improve health, (4) ensure the safe and effective use of medical products, (5) promote health and reduce chronic disease associated with diet and weight, (6) improve health, fitness and quality of life through promoting daily physical activity, (7) reduce substance abuse, and (8) reduce illness, disability and death related to tobacco use and exposure to secondhand smoke. Additionally, students will be trained in improving patient safety using a systems perspective. Students will be introduced to error reporting systems and techniques to identify, categorize and reduce medication errors.

The course includes lectures as well as recitation sessions. During the recitation, students will work on designing, implementing and evaluating a community based public health program.
Student must have 5th year standing in order to register for this course.
Credits: 3
Every Semester

PHM523 Pharmacogenomics
This course exposes students to the genetic basis of diseases as related to mechanisms of action/toxicities, and inter-individual differences in response to medications and drugs. The focus is on personalized medicine and is based on molecular markers of diseases, medication effectiveness, and adverse events. An emphasis is placed on the most important genetic and genomic technologies involved in genotyping drug metabolizing enzymes, transporters, and other targets. Students are given opportunities to review and discus current case studies of pharmacogenomics and individual variations in response to medications and drugs. The course ends with a discussion of ethical issues involving genetic testing, patient stratification and clinical trials, and the role of the FDA in pharmacogenomics and personalized medicine. The course consists of lectures and student-led case discussions. Throughout the course, students will be developing critical thinking, problem solving, and life-long learning skills needed in pharmacy practice.
Upon completion of this course, students will be able to describe the major genetic determinants involved in human diseases and their relation to variations in response to medications/drugs. Students also will be able to apply the concept of

genetically determined populations to most aspects of pharmacotherapeutics, and will have the knowledge to educate other health care professionals and patients about the availability and importance of genetic testing in order to provide personalized patient care.
Pre requisites: PHM 313, PHM 320, PHM 410
Co requisite: PHM 528
Credits: 2
Every Spring

PHM524 Clinical Pharmacokinetics
Clinical pharmacokinetics is the process of using drug concentrations, pharmacokinetic principles, and pharmacodynamics criteria to personalize drug therapy. Class time includes traditional lectures coupled with active learning exercises (e.g. case studies).
Following the completion of this course, students will be able to describe the way in which the pharmacokinetics of certain medications may be altered in specific patient populations (e.g., geriatrics, patients with renal or hepatic impairment). Students will also be able to describe the pharmacokinetics of specific medications (e.g., antiepileptics) their usual therapeutic concentration range, the relationships between concentration and pharmacodynamics effects, and factors affecting these relationships. Using knowledge regarding the pharmacokinetic characteristics of each medication, students will be able to individualize therapy for a given patient.
Pre requisites: PHM 323, PHM 412, PHM 425, PHM 516
Co Requisite: PHM 528 & 529
Credits: 2
Every Spring

PHM525 Pharmacy Law and Ethics
Like all professionals, pharmacists can be held legally accountable for the consequences of their personal conduct while providing care to their patients. This course is designed to provide students with an insight into the legal aspects of their practice. Students will be introduced to federal and state laws, statutes and professional ethics chartered by pharmacy professional associations. The course will cover both federal and state laws that impact and regulate the practice of pharmacy. Topics including the federal regulation of medications, regulation of controlled substances, and federal and state regulation of pharmacy practice will be discussed using case studies. Detailed evaluation of the New York State laws and the relevant federal regulations pertaining to pharmacy may help the students in preparing for their Multistate Pharmacy Jurisprudence Exam (MPJE), and in understanding the diverse legal issues impacting future professional practice. Using an active learning strategy, students will be asked to critically think and provide rational and moral arguments on issues that pose legal, ethical and moral challenges.
Following completion of this course, students will be able to distinguish between moral, ethical and legal behaviors, construct arguments on issues pertaining to legal and ethical conduct in pharmacy practice, and demonstrate a working knowledge of laws under which pharmacists and pharmacies operate.
Student must have 5th year standing in the Professional Program in order to register for this course.
Credits: 3
Every Fall

PHM 526 Introduction to Critical Care: A Case Study Approach
Students will be introduced to the concepts and approaches in the care of critically ill adult patients. This course will explore selected topics commonly encountered in critical care settings with a focus on diagnostic tests, treatment choices, monitoring parameters, and therapeutic outcomes. This course will use a combination of classroom-based presentations and case-based small group activities. Students will exercise judgment in the care of patients, apply knowledge learned in the classroom, and develop teamwork skills. Students will also gain an in-depth understanding of the pharmacists' role in the treatment of critically ill patients.
Prerequisites: PHM 411, PHM 412, PHM 424, and PHM 425 and 5th Year Standing
Credits: 3
Every Fall

PHM 528 Modular Organ Systems Therapeutics Sequence (MOST VII)
This is the seventh of an eight-course sequence combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy in order to provide the student with an integrated approach to understanding the molecular mechanisms of drug action, the effects of medications on the body, and rational therapeutic approaches to important disease states. An emphasis is placed on the most common conditions for which pharmacists and student pharmacists are exposed to when providing patient care. In general, the students learn pharmacologic principles first and then learn rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice. This course focuses on autoimmune disease, pain management, rheumatological disorders, oncology, and organ transplantation.
Pre reqs: PHM 321, 325, 326, 414, & 513
Co-reqs: PHM 523 & 524
Credits: 3.50
Every Spring

PHM529 Modular Organ Systems Therapeutics Sequence (MOST VIII)
This is the last of an eight-course sequence; combines the disciplines of pharmacology, medicinal chemistry, and pharmacotherapy in order to provide the student with an integrated approach to understanding the molecular mechanisms of drug action, the effects of medications on the body, and rational therapeutic approaches to important disease states. An emphasis is placed on the most common conditions for which pharmacists and student pharmacists are exposed to when providing patient care. In general, the students learn pharmacologic principles first and then learn rational pharmacotherapeutics. Throughout the sequence, students will be developing their critical thinking and problem-solving skills so that they are well prepared for experiential education and, eventually, pharmacy practice. The final course in the MOST series, a potpourri of topics are covered such as glaucoma, introduction to geriatrics, introduction to pediatrics, enteral and parenteral nutrition, and managing the patient with hypovolemic and septic shock, and clinical toxicology.
Pre reqs: PHM 321, 325, 326, 414, & 513
Co-reqs: PHM 524
Credits: 3
Every Spring

PHM 530 Evidenced Based Approach to Cardiovascular Pharmacotherapy
The evidence-based approach to cardiovascular (CV) pharmacotherapy course builds on students' knowledge of CV diseases and CV pharmacotherapy. It will also explore many topics beyond those required in the curriculum (e.g., pulmonary hypertension, hypertensive crisis). In addition to the pharmacotherapy management of CV diseases, the course will introduce landmark clinical trials and clinical guidelines to prepare students to practice evidence-based medicine. Structure of the course will comprise of patient cases and patient profiles in order to facilitate understanding and promote complex decision-making. Case discussions will allow students to develop problem-solving skills in the areas of multifaceted CV topics. The course will be dedicated to interactive discussions surrounding the patient cases.
Prerequisites: PHM 411, 412, and 414. 4th or 5th Year Standing
Credits: 3
On Occasion

PHM 531 Introduction to Global Health for Health Professions
The Global Health Elective Course is a discussion-based course which prepares students to be global citizens and to meet the challenges of delivering effective heath care worldwide. A global citizen is defined as "someone who identifies with being part of an emerging world community and whose actions contribute to building this community's values and practices." This course will explore the forces and interventions which have helped to shape the current health of the world, as well as the dynamic between health professionals when working together to address global health issues. A

wide variety of multimedia will be utilized, including readings, videos, and podcasts, to foster dialogue. Students are expected to arrive to class prepared to actively participate and will take turns moderating in-class discussions. Practical experiences, projects, and presentations will also be employed to ensure students have the skills necessary to evaluate and design team-based health interventions for a specific patient population in a limited-resource setting.
Credits: 3
On Occasion

PHM 532 Hospital Pharmacy Administration
This course is designed to help students become familiar with the various operations and administrative components of hospital pharmacy. Students will learn about topics such as legal and regulatory requirements necessary to ensure safe and efficient medication use systems, outcomes, and improving the patient experience.
Credits: 3
Every Spring

PHM 533 Contemporary Compounding
This is a three-credit course consisting of two lecture hours and three laboratory hours per week. This course is designed to train pharmacy students in the field of compounding of extemporaneous dosage forms such as capsules, suppositories suspensions, ophthalmic solutions, lip balms, nasal sprays, troches, suppositories, ointments, and creams. It also provides an introduction to the concepts of home IV
infusion therapy and gives them an opportunity to practice in preparing parenteral and enteral products. The course provides students with a unique opportunity to
practice their chosen time-honored profession extemporaneous compounding for products that are not commercially available for patients with special needs.
As the role for compounding pharmacy continues to grow it will help provide additional pharmacists to the work force unique and innovative skill sets. In this course students will be trained to make ready upon request specialized extemporaneous formulations in case of a national emergency emanating
from acts of biological, chemical or nuclear terrorism. Students will be familiarized with guidance for facility and equipment requirements, and raw material sources and requirements, GMPs, GLPs, necessary record-keeping, calculating stability and beyond use dating.
A pre requisite of PHM 422 is required.
Credits: 3
Every Fall

PHM 534 Prescription Accessories
This course will discuss the importance of the prescription accessory department as a part of the ambulatory pharmacist's practice. Prescription accessories will be categorized with respect to the pharmacist's participation as a member of the healthcare team. Topics to be covered include legal requirements as dictated by CMS and the issues related to third party reimbursement policies for prescription accessories. Students will be instructed how to counsel patients regarding in the proper usage of thermometers, home pregnancy tests, fertility monitors, pregnancy preventatives, enemas, feminine syringe, pessaries, rectal and vaginal dilators, diabetic monitors and accessories male impotency pumps, SIDS monitors, enuretic devices, vaporizers, humidifiers, nebulizers, atomizers, wound care, tissue trauma, bandages and surgical dressings, catheters, ostomy supplies and devices, durable medical equipment, and types of orthotics and fitting procedures.
Student must have a 4th or 5th year standing in order to register for this course.
Credits: 3
Every Fall and Spring

PHM 535 Psychiatric Disorders
This elective course will offer insight into the most commonly diagnosed mental health disorders as well as the various personality disorders. The course will improve a pharmacy student's understanding and knowledge of the various mental disorders, as well as the pharmacotherapeutic and behavioral interventions utilized in managing these disorders. Students will be able to develop a broad understanding of the social and cultural differences that exist in our communities, and their relationship to individuals with mental illness. Likewise, students will have the opportunity to interact with both diverse individuals and communities and contribute to improved community mental health by advocating for vulnerable groups. Students will be exposed to authentic case scenarios that emulate the clinical experience which will facilitate their learning and encourage active participation in their decision-making process. Likewise, students will be given the opportunity to put into practice concepts learned in class by interacting with people in real-world clinical settings. There will be opportunities to consolidate learning with a number of relevant practical activities throughout the course.
A prerequisite of PHM 425 and 5th Year Standing is required.
Credits: 3
Every Spring

PHM 536 Complementary and Alternative Medicine
More than 50% of the world's population uses complementary and alternative medicine (CAM), mostly in combination with conventional medication. There is growing evidence outlining the benefits as well as the possible adverse and side effects of CAM.1 As primary care providers, pharmacists are both accessible to patients and one of the most trusted healthcare professionals. As such they are at the forefront, providing information and guidance to patients about safe and effective use of all medicines. The goal of the alternative medicine elective course is to give students an introduction to different cultures approach to healing and therapy; expose students to alternative therapies in use in the United States, and to give students the ability to discern the validity of some alternative therapies as well as a level of comfort and respect for complementary therapy that is more frequently being used in Western Medicine.
Credits: 3
On Occasion

PHM 537 The Pharmacist and Correctional Health Care
This course is designed educate students to respond to current health issues within the correctional system. Through readings, reflective writing, and class discussions, students will learn about the role of the pharmacist in correctional health facilities and the complexities of health for people in prison and will gain understanding and skills in order to apply inter-disciplinary approaches to prison health.
Student must have a 4th or 5th year standing in order to register for this course.
Credits: 3
On Occasion

PHM 539 Advanced Topics in Infectious Diseases
This course provides students an opportunity to expand their knowledge in the area of infectious diseases including human immunodeficiency virus (HIV) infection, tropical diseases, travel medicine, etc. Students will build upon their current pharmacotherapeutic knowledge through in-depth reading, discussions, journal club, and patient case presentation.
Pre requisites: PHM 516 and PHM 517
Credits: 3
On Occasion

PHM 540 Self-Care in Community Practice
This required course is aimed for students to acquire the knowledge, skills, and attitude for practice in the community setting and other outpatient settings. Throughout this course, students will learn about non-prescription medications, herbal supplements, and other self-care remedies available to treat numerous medical conditions. For each condition discussed, students will learn treatment modalities and when to refer care to another healthcare provider. For each medication discussed, students will learn the basic mechanism of action, uses, potential adverse effects, common drug interactions, and any relevant contraindications. In addition, students will practice gathering relevant information, counseling patients on self-care while reinforcing communication techniques useful for conversing with patients on various cultural and socio-economic backgrounds.
Requisites: PHM 325, PHM 326, PHM 423, PHM 424 and PHM 425
Corequisites: PHM 513, PHM 516, and PHM 517

Credits: 1
Rotating Basis

PHM 599 Independent Study / Special Project
This elective provides students with an opportunity to pursue specific areas of interest in pharmacy, while collaborating with a faculty mentor on a special project that is research-based in nature. It is an opportunity for students to develop critical thinking and problem-solving skills. This includes developing a study hypothesis, designing the study methodology, researching the subject matter, collecting and analyzing data, and lastly presenting the research findings. Through working with a faculty member in his/her area of interest, students are also able to explore, in greater depth, the knowledge base in that particular area of pharmacy.

How to Apply?
Students may apply to take the special projects elective during the P4 or P5 Year. Any student in good academic standing interested in taking this course must submit the following to the Assistant Dean for Academic and Student Affairs:

1. A research proposal for a project mutually agreed upon by the student and the faculty member.

2. A description written by the faculty member indicating what will be expected of the student and the way in which the student will be assessed.

3. A statement describing why the student is interested in this project and its relation to future career goals.

4. A PHM599 Special Projects form that may be obtained from the Office of Student and Professional Affairs.

Students should be aware that, depending on the type of research they are participating in, Institutional Review Board (IRB) approval may be necessary from LIU and/or the practice site. Once approval has been granted, both the student and the faculty member will be notified and the student will be required to register for PHM599 during the appropriate semester. All paperwork should be submitted at least four weeks prior to the start of the semester in which the student will register for PHM599.
Credits: 3
Every Fall, Spring and Summer

PHM 610 Clinical Pharmacy Patient Care Experience Advanced Pharmacy Practice Experience
The Clinical Pharmacy Patient Care Experience Advanced Pharmacy Practice Experience (APPE) is designed to allow the student the opportunity to develop and use skills based on the knowledge acquired in previous courses with an emphasis on formulating patient-specific care. The student must attain these skills to be prepared to practice pharmacy independently. As an integral member of the health care team, the student will participate in daily work and attending rounds in the acute care setting. This will incorporate rounding in a pharmacy specialty area at a designated hospital or medical center. After completion of the APPE, the student will have gained an appreciation for the application of critical thinking skills through the resolution of drug-related problems encountered during the rotation. The student will be afforded the opportunity to develop critical thinking skills by collecting relevant data, evaluating the data, formulating a judgment from the information presented, and lastly making a decision. While making clinical decisions, this acute care APPE will further develop the student's skills in critical thinking, problem solving, literature evaluation, and written and oral communication.
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 611 Ambulatory Care Advanced Pharmacy Practice Experience
Today's ambulatory care pharmacist has tremendous potential to use all of his/her extensive pharmaceutical and therapeutic knowledge to improve patients' quality of life. Upon graduation, the pharmacy student must be able to competently execute the various daily activities performed in providing ambulatory pharmacotherapeutic care (entrustable professional activities) in order to practice the profession effectively. This course is intended to promote entry-level competency in ambulatory care practice in the domains of pharmacist-delivered patient care, public health, communication skills, leadership abilities, and legal considerations by requiring students to apply their knowledge to clinical problems in a realistic context. This learning experience will involve critical thinking, patient assessment, problem solving, and counseling. It also allows the student to develop relationships with patients and enhance his/her communication skills with patients and other health care providers. The pharmacy student will learn to assume responsibility for patients' pharmacotherapeutic and related health problems and to become an integral part of the patient care team. Additionally, the student will enhance his/her skills in drug literature evaluation and interpretation and establish how the findings may apply to clinical practice. Course faculty will utilize modeling and feedback to assist students in successfully visualizing and achieving performance goals. It is intended that upon completion of this clerkship, students will be able to apply the Pharmacists' Patient Care Process to patients in the outpatient hospital or community clinic setting without direct supervision to prepare for entry-level practice.
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 612 Community Practice Advanced Pharmacy Practice Experience
Students are asked to provide direct patient care in a community pharmacy setting. Students are expected to dispense medications under the supervision of a pharmacist and to intervene with prescribers when the situation arises. Students also become competent in recommending nonprescription and alternative therapies, and spend considerable time counseling patients. Students are involved with key administrative duties such as maintaining records and interacting with pharmacists and support personnel.
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 613 Institutional Practice Advanced Pharmacy Practice Experience
Students are exposed to all elements of a modern hospital medication distribution system, and the policies, procedures, and committee structure required in an institutional setting. Students are expected to be involved with various institutional committees and participate in administrative assignments. Students provide patient-specific interventions and hone their skills in communicating with other health care professionals including nurses and physicians.
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 614 Inpatient General Medicine Advanced Pharmacy Practice Experience
The Internal Medicine Advanced Pharmacy Practice Experience is designed to build upon knowledge, skills, and attitudes acquired in previous courses with emphasis on formulating patient-specific care plans. The student must attain these skills to be prepared to practice pharmacy independently. As an integral member of the health care team, the student will participate in daily work and attending rounds in an inpatient setting. This will incorporate patient-care rounds on an internal medicine or general medicine floor at a designated hospital or medical center. This advanced pharmacy practice experience (APPE) will allow the student, as a member of the interprofessional team, to strengthen his/her patient care skills thereby helping the student to integrate earlier curricular content and principles to the practice of direct patient-care. Clinical decision making during this APPE will further develop the student's skills in critical thinking, problem solving, literature evaluation, and written and oral communication. As a student pharmacist, he/she will participate in structured activities under the direct supervision of a preceptor.

Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 615A & 615B Senior Seminar
The senior seminar course is an integrative/ reflective capstone blended course designed to help transition pharmacy students into professionals by emphasizing self-awareness, written and oral communication, professionalism and leadership. The goals of this course are: 1) to help reinforce the academic rigor of the final year towards successful licensure; 2) to increase student motivation and engagement; 3) to increase career aspirations; 4) to improve student confidence; and 5) to demonstrate proficiency as a future pharmacist. This course will provide support to enhance and reinforce Advanced Pharmacy Practice Experiences (APPEs) and preparation for professional career through intermittent in-person meetings and longitudinal activities.
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 1 to 2.50
Every Fall and Spring

PHM 616 Non-Patient Care Focus Elective Advanced Pharmacy Practice Experience
This elective Advanced Pharmacy Practice Experience will provide the student with an opportunity to apply abilities gained during prior coursework in various
pharmacy practice settings. Students will be offered an opportunity to explore areas of interest that are available in non-patient care environments (ex. Drug information, research, pharmaceutical industry, managed care, pharmacy administration, medical communication, etc.).
Course open to students with 6th Year Standing in Pharm.D. Program
Credits: 5
Every Fall, Spring and Summer

PHM 617 Patient Care Elective Advanced Pharmacy Practice Experience
This elective Advanced Pharmacy Practice Experience will provide the student with an opportunity to explore areas of direct patient care that align with his/her
professional interest and/or expand students¿ understanding of patient care opportunities. Students will be expected to utilize abilities, skills, and knowledge
learned previously in the curriculum in order to participate in a variety of direct patient care activities, including, but not limited to collecting patient-specific
information, evaluating and monitoring drug therapy, educating patients and caregivers, and responding to drug information inquiries.
Pre requisite: Completion of all PHM 300, PHM 400, and PHM 500 level courses. Course open to students with 6th Year Standing in Pharm.D. Program.
Credits: 5
Every Fall, Spring and Summer

PHARM. D. PROGRAM QUALITY INDICATORS

In compliance with accreditation guidelines, LIU Pharmacy regularly makes available various quality indicators for the Doctor of Pharmacy program. These are presented below.

On-time Graduation Rates

Graduating Year	On-time Graduation Rate
2025	• 184 students were admitted in 2021 as the class of 2025 • 143 students graduated on time • 19 students were delayed • 16 students were dismissed • 6 students changed major or did not return voluntarily • The on-time graduation rate is 77.72% (143/184)
2024	• 213 students were admitted in 2020 as the class of 2024 • 149 students graduated on time • 36 students were delayed • 19 students were dismissed • 9 students changed major or did not return voluntarily • The on-time graduation rate is 70% (149/213)
2023	• 201 students were admitted in 2019 as the class of 2023 • 146 students graduated on time • 40 students were delayed • 15 students dismissal/withdrawal • The on-time graduation rate is 73% (146/201)
2022	• 196 students were admitted in 2018 as the class of 2022 • 168 graduated on time • 19 students were academically dismissed; 1 student voluntarily withdrew; 29 students will have a delayed graduation • The on-time graduation rate is 86% (168/196)
2021	• 199 students were admitted in 2017 as the class of 2021 • 181 graduated on time • 9 students were academically dismissed; 5 students voluntarily withdrew; 4 students will have a delayed graduation • The on-time graduation rate is 91% (181/199)
2020	• 219 students were admitted in 2016 as the class of 2020 • 182 graduated on time • 8 students were academically dismissed; 10 students voluntarily withdrew; 19 students will have a delayed graduation • The on-time graduation rate is 83% (182/219)
2019	• 200 students were admitted in 2015 as the class of 2019 • 184 graduated on time • 3 students were academically dismissed; 5 students voluntarily withdrew; 8 students will have a delayed graduation • The on-time graduation rate is 92% (184/200)
2018	• 205 students were admitted in 2014 as the class of 2018 • 186 graduated on time • 5 students were academically dismissed; 12 students voluntarily withdrew; 2 students will have a delayed graduation • The on-time graduation rate is 90.7% (186/205)
2017	• 200 students were admitted in 2013 as the class of 2017 • 161 graduated on time • 8 students were academically dismissed; 12 students voluntarily withdrew; 19 students will have a delayed graduation • The on-time graduation rate is 80.5% (161/200)
2016	• 193 students were admitted in 2012 as the class of 2016 • 167 graduated on time • 4 students were academically dismissed; 8 students voluntarily withdrew; 14 students will have a delayed graduation • The on-time graduation rate is 86.5% (167/193)
2015	• 209 students were admitted in 2011 as the class of 2015 • 182 graduated on time • 6 students were academically dismissed; 8 students voluntarily withdrew; 13 students will have a delayed graduation • The on-time graduation rate is 87.1% (182/209)

Pharmacist Licensing Examinations

Holders of the Doctor of Pharmacy degree who have fulfilled all scholastic requirements may sit for the state board of pharmacy licensing examinations. Graduating students are advised to carefully consult with the boards of pharmacy in the states they are considering to obtain licensure to ensure they comply with regulations concerning internship and licensure requirements.

North American Pharmacist Licensure Examination (NAPLEX) Pass rates:

Class of 2018 first-time takers (187 candidates); Pass rate: 85.03%

Class of 2019 first-time takers (168 candidates); Pass rate: 76.79%

Class of 2020 first-time takers (161 candidates); Pass rate: 82.61%

Class of 2023 first-time takers (156 candidates); Pass rate: 68.6%

Class of 2024 first-time takers (145 candidates); Pass rate: 62.1%

Class of 2025 first-time takers (155 candidates); Pass rate: 78.1%

Multistate Pharmacy Jurisprudence Examination (MPJE) Pass rates:

Class of 2018 first-time takers (164 candidates); Pass rate: 76.83%

Class of 2019 first-time takers (147 candidates); Pass rate: 77.55%

Class of 2020 first-time takers (148 candidates); Pass rate: 75.68%

Class of 2023 first-time takers (155); Pass rate: 67.1%

Class of 2024 first-time takers (124); Pass rate: 68.5%

Class of 2025 first-time takers (139); Pass rate: 73.4%

Post-graduation Placements

Class of 2025 Placement:

- Community Practice: 78
- Hospital Practice: 30
- Industry: 4
- Managed Care: 2
- Long Term Care: 0
- Other: medical writers RPh: 0
- Employed outside the profession: 2
- Post grad training: 8
- Residency PGY1: 15
- Fellowship: 5
- Other (JD, MS, PhD): 0
- Unemployed: 2
- Lost to followup: 33

Net 179

Class of 2024 Placement:

- Community Practic: 60
- Hosptial Practice: 17
- Industry: 3
- Managed Care: 0
- Long Term Care: 1
- Other-medical writers RPh: 0
- Employed outside the profession: 2
- Post grad training: 10
- Residency PGY1: 19
- Fellowship: 3
- Other (JD, MS, PhD): 34

- Unemployed*: 0
- Lost to follow up: 21

Net: 170

Class of 2023 Placement*

- Community Practice: 71
- Hospital Practice: 48
- Industry: 11
- Managed Care: 2
- Long Term Care: 2
- Other- medical writers RPh: 2
- Employed outside profession: 0
- Post grad training: 0
- Residency: 22
- Fellowship: 5
- Other (JD, MS, PhD): 21
- Unemployed: 0
- Lost to follow up: 20

Net: 204

Other Quality Indicators

Class of 2020 Academic Honors

42.9% (78/182) graduating on-time students received Latin honors (GPA of 3.50 or greater)

- 12.6% (23/182) graduated *summa cum laude* (GPA of 3.80 or greater)
- 9.3% (17/182) graduated *magna cum laude* (GPA of 3.70 or greater)
- 20.9% (38/182) graduated *cum laude* (GPA of 3.50 or greater)

ACADEMIC AWARDS

The following awards can update as well as additional awards may be added throughout the acadmic year.

College Gold Medal
This award is given to the student having the highest general standing in the third, fourth, fifth, and sixth year's work.

College Silver Medal
This award is given to the student having the second-highest general standing in the third, fourth, fifth, and sixth year's work.

College Bronze Medal
This award is given to the student having the third-highest general standing in the third, fourth, fifth, and sixth year's work.

Arnold & Marie Schwartz College of Pharmacy and Health Sciences Professionalism Award
This award is given to a graduating senior who exhibits the ideals of professionalism by exceptional service and commitment to the profession of pharmacy through involvement in professional organizations or other extracurricular opportunities; has assumed a leadership role; and maintained good academic standing.

APhA-ASP Senior Recognition Certificate
The American Pharmacists Association honors a graduating student member who has made the greatest contribution to his or her APhA-ASP chapter with a Senior Recognition Certificate.

Pola and John Bradman Award in Leadership and Service
This award is given to a graduating student who has excelled in service and leadership by playing an active role on behalf of the student body and who has maintained an index of 2.75 or better.

Wolters Kluwer Clinical Drug Information Award of Excellence in Clinical Communication
This award, sponsored by Wolters Kluwer Health, recognizes high academic achievement and outstanding clinical communication skills. The recipient must be in the top 25% of his/her class academically and shall have demonstrated superior verbal and written communication skills. The recipient receives the following: an electronic award certificate, and a 1-year subscription to Lexi-COMPLETE.

Irwin and Lenore Gerson Award
This award is given to a graduating student for qualities of leadership and excellence in pharmacist/patient communication.

Seymour Katz Memorial Award
Sponsored by The Royal Counties Society of Health-System Pharmacists, this award was established in memory of Seymour Katz, FASHP, M.S. '74. The award includes a prize of $500, a framed certificate, and a one-year membership to the New York State Council of Health-System Pharmacists. This annual honor is awarded to a graduating senior, who is a member of the New York State Council of Health-System Pharmacists and demonstrates a high level of scholarly activity to commemorate the passion of scholarship and research manifested by Seymour Katz. The applicant must submit an exhibition of research and/or scholarship in the form of a published article or poster presentation. The application must also submit a brief personal statement describing the role of involvement in the project and how the experience has affected the applicant's future as a pharmacist.

Professor Shirley Kraus Research Award
A certificate is awarded to an entry-level Doctor of Pharmacy degree candidate who has conducted a research project under the supervision of a faculty member in the Division of Pharmaceutical Sciences.

Membership in the Pharmacists Society of the State of New York
Membership for five years is awarded to a student who is an active member of student PSSNY, has demonstrated an active interest in the profession, has displayed a capacity for leadership in the profession, and has a record for public service.

Merck Awards
The Merck Awards are presented to outstanding students in pharmacy studies. The award consists of an acrylic representation of the Merck Manual. The first award goes to the student who has attained the highest scholastic standing in Pathophysiology/Immunology; the second award to the student who has attained the highest scholastic standing in Biochemistry; the third award to the student who has attained the highest scholastic standing in Molecular Biology; the fourth award to the student who has attained the highest scholastic standing in Human Genetics; and the fifth award to the student who has attained the highest scholastic standing in Pharmacogenomics.

Excellence in Pharmaceutics Award
This award consists of a certificate given to the student having the highest numerical average in Pharmaceutics I-V.

Viatris Pharmaceuticals Excellence in Pharmacy Award
This award is presented to a student in the top 25 percent of his/her class academically, who has demonstrated high professional motivation and the intent to enter practice upon graduation. The recipient shall demonstrate high personal motivation and possess a unique ability to communicate drug information. The honoree will receive a certificate acknowledging the award and a custom-framed lithograph entitled "Pharmacy: A Tradition of Healing."

The United States Public Health Service Excellence In Public Health Pharmacy Practice Award
This award is presented to a student who has shown excellence in educational and community-based programs to advance the goals stated in "Healthy People 2030."

United States Public Health Service Excellence in Interprofessional Education Collaboration Award
This award is presented to an interprofessional team of health professional students and/or faculty, whose interdisciplinary work (e.g., research, community practice, and/or public health education) has significantly impacted the community they serve. Eight Regional Awards will be conferred. One Overall National Awardee will be selected and presented their award in person at the June IPEC Bi-Annual Meeting Reception in Washington, DC. A webinar series or continuing education publication will be developed from selected project/topic areas.

Stephen M. Gross Faculty Council Award
This award is given to a graduating student based on academic performance and professional motivation.

Arnold & Marie Schwartz College of Pharmacy and Health Sciences Pharmacy Excellence Award
Candidates for this award must display a commitment to patient-centered care, show superior academic achievement and the ability to translate clinical knowledge into practical patient care. Special consideration will be given to a student interested in pursuing postgraduate training/education.

Arnold & Marie Schwartz College of Pharmacy and Health Sciences Excellence in Modular Organ System Therapeutics (MOST) series
This award recognizes a graduating senior with high academic achievement in the MOST course series and who demonstrated outstanding promise in the delivery of patient-centered care.

Arnold & Marie Schwartz College of Pharmacy and Health Sciences Mary M. Lai Community Service Award
This award was established in honor of Mary Lai '42, H'86, Senior Advisor and Trustee Emerita, in recognition of her generosity and responsiveness to the needs of others within and outside of the University community. The award recognizes a graduating student who volunteers his/her time, energy and talents in our college or community, motivates others to get involved, and works with

others to make a difference. This student is also awarded a gift of $250.

Alumni Association Board of Directors Professional Excellence Award
This award will be given to a graduating sixth-year student who has a GPA of 3.0 or higher and exhibits a commitment to volunteerism through a record of service to the College, colleagues, community and profession. This award consists of a gift of $300.

New Jersey Pharmacists Association (NJPhA) Award
The New Jersey Pharmacists Association presents a certificate of appreciation to a student who is an active member in the city chapter with plans for staying involved after graduation. Additionally, one free full-year pharmacist membership to NJPhA is provided to the recipient upon graduation.

Graduate Award in Drug Regulatory Affairs
An award is issued in recognition of a graduate student’s scholarly contributions to the field of Drug Regulatory Affairs

Graduate Award in Pharmacology and Toxicology
An award is issued in recognition of a graduate student’s scholarly contributions to the field of Pharmacology and Toxicology

Graduate Award in Pharmaceutics
An award is issued in recognition of a graduate student’s scholarly contributions to the field of Pharmaceutics

Demonstrating Excellence in the Shared Credit Program: PharmD/MBA
This award recognizes a graduating student with excellent academic standing in the Doctor of Pharmacy program (Prof GPA 3.5 or above) and who exhibits excellent leadership and entrepreneurial qualities (deemed by the School of Business).

REGISTRATION

Enrollment

Students are eligible to enroll in courses at the University if the following criteria have been met:

- Must be a current/active student.
- Must be in good financial standing with the University..
- Must be academically eligible to continue in their program.
- Must have satisfied all Admissions requirements.

Students must adhere to the following deadlines for enrollment:

- Enrollment should be completed by the end of the drop/add for each term, as defined in the academic calendar which is published in the catalog and available online at https://liu.edu/enrollment-services/registration/academic-calendar. For Fall and Spring full-semester courses, the drop/add period is the first two weeks of the semester.
- Students are not permitted to enroll beyond the second week of the term. Students are not permitted to continue attending classes for which they are not enrolled beyond the second week of the term. Under no circumstances is retroactive enrollment permitted.

Students are eligible to select and register for classes through their My LIU (my.liu.edu) account. Students with academic and financial restrictions may not be able to register online and should meet with their success coach.

The Division of Student Affairs disseminates registration communications to all students via LIU email before the start of the summer/fall and the winter/spring semester registration periods. Registration dates are also noted on the academic calendar and the My LIU account under "Enrollment Dates".

Students are encouraged to meet with their Success Coach before the start of the registration period to plan their academic semester schedule.

Adding or Dropping Courses

Adding courses: Students may add classes to their schedules through their MyLIU portal during the online registration period. Online registration ends after the second week of classes for the fall and spring terms. Nontraditional terms and sessions will have customized add dates. See the University's Tuition Liability Policy for additional details. Some classes may be blocked for online registration because they require department approval. If online registration is unavailable, the student must submit a completed Enrollment Change Form to the Office of Enrollment Services with approval signatures. Please see the section on Departmental Consent below for additional information.

Beginning with the third week of classes, course additions require the approval of the following persons and/or departments before the Office of Enrollment Services will process the change:

- Instructor (required);
- Dean or Department Chairperson (required);
- Student Financial Services (for changes in cost of attendance or enrollment status).

All course enrollment for full-semester courses must be completed by the end of the fourth week of the term. Enrollments after that time is not permitted. Retroactive enrollment for courses from a prior term is not permitted under any circumstance.

The following course enrollments require special administrative or departmental consent:

- Restricted Courses: occurs if the department has restricted enrollment in a course. The student must obtain either a course permission code or signature from the instructor, department chair, or dean, as defined by the academic department.
- Credit Overloads: occurs at the career level; when a student would like to add a course(s) that will take him/her over 19 credits for undergraduates and 12 credits for graduates for the semester. Full-time undergraduate students who add credit hours over 18 will be charged additional fees for those excess hours. Students wishing to enroll in an overload must obtain the signature of the advisor and chair as defined by the academic department.
- Closed Courses: occurs when there are no seats available in the course. The student must obtain the signature of the course instructor and department chairperson.
- Time Conflicts: occurs when two courses take place during the same or overlapping time period. The student must obtain the signature of both instructors and the department chairperson for each course.
- Requisite Overrides: occurs when the student does not have the required pre- or co-requisite for the course. The student must obtain the signature of the instructor and department chairperson.
- Service Indicator Overrides: occurs when a student has a hold on their account that prevents them from engaging in an enrollment activity. Students are advised to check for registration holds on their MyLIU portal Student Center page to determine the origin of each hold. The student should contact that office noted and remedy the situation so as to have the hold either removed from their account or obtain approval for the hold to be overridden.

Dropping courses: Students can drop full-semester classes up through the second week of the term with no penalty as follows:

- Drop one or more courses online using their MyLIU portal.
- Drop courses at the Office of Enrollment Services.
- Drop courses through their Success or Enrollment Services coach.

The drop period for classes that meet for less than the full semester is as follows:

- Sessions meeting 7 or more weeks: courses can be dropped up through the first week.
- Sessions meeting 3 to 6 weeks: courses can be dropped up through the 3rd day of the session.
- Sessions meeting 2 weeks or less: courses can be dropped up through the 1st day of the session.

Students may have their financial aid reduced if the student's enrollment status changes from full-time to part-time, or from full-time or part-time to below half-time. Students will have their financial aid canceled if the student drops all courses and does not incur any liability, or fails to meet satisfactory academic progress standards as a result of the cancellation of enrollment. Financial aid for future terms will also be canceled. See the Drop and/or Withdrawal from Courses Policy and the Satisfactory Academic Progress Policy for additional details. Students receiving Veterans benefits should meet with the Veteran's Certifying Official to determine if drops will affect their current and future benefits when they; add or drop any course, withdraw from or terminate enrollment at the University.

Drops that change a student's enrollment status from full-time to part-time, or from full or part time to below half-time, may have their Federal, State, and/or University aid adjusted. The University may also be required to report the student's change in enrollment status to lenders, which can trigger the repayment of student loans. Students will be notified in these cases via writing.

Drops after the add/drop period must be officially processed as a partial or full withdrawal. Please see Withdrawal Policy and/or Appeals Policy for additional details.

The following course drops may require special administrative or departmental consent as follows:

Co-Requisite Overrides: occurs when the student is attempting to drop a course that is a co-requisite of another course not being dropped. The student must obtain the signature of the instructor, and chairperson, as defined by the academic department.

Student-Athletes: NCAA regulations require that student-athletes must be full-time degree-seeking students to participate in intercollegiate athletics. Student-Athletes must be enrolled in a minimum of 12 credits per term. If a student-athlete falls below 12 credits, they are immediately ineligible to practice or compete. Athletes are advised to speak with the athletic department before dropping courses.
Residential Life: Undergraduate resident students are expected to maintain full-time enrollment status each term. Undergraduate residents are advised to speak with the Office of Residence Life before dropping classes.

Withdrawal

Students are able to withdraw from course(s) after the end of the drop/add period. An official withdrawal refers to an action taken by a student to discontinue enrollment in the course. The course is recorded on the transcript with a grade of W.

- Partial Withdrawals. When a student withdraws from one or more classes, but remains enrolled in at least one class.
- Complete Withdrawals. When a student drops or withdraws from all of his/her courses in a current term. This can occur at one time or over a period of time within a term.

An unofficial withdrawal refers to a student who fails to attend or ceases to attend one or more classes before the withdrawal deadline detailed in the academic calendar but doesn't take appropriate action to officially withdraw from the class/university. Since no official withdrawal was completed, faculty can assign a grade of NC (No Credit earned) or F at their discretion.

Students may officially withdraw from one or more courses through the 10th week of the term for full-term courses during the fall and spring semesters.

Students may officially withdraw from Summer Session courses or courses meeting for shorter sessions within regular fall/spring semesters according to the schedule below:

- 12 week sessions – withdrawals permitted through the 8th week.
- 10 week sessions – withdrawals permitted through the 7th week.
- 7 week sessions – withdrawals permitted through the 5th week.
- 6 week sessions – withdrawals permitted through the 4th week.
- 5 week sessions – withdrawals permitted through the 3rd week.
- 2 week sessions – withdrawals permitted through the 7th day.
- 1 week sessions – withdrawals permitted through the 3rd day.

The effective date of withdrawal for a student who withdraws is the earlier date of:

- the date the student began the withdrawal process; or
- the date the student otherwise provided the University with official notification of the intent to withdraw; or
- the date the institution becomes aware the student ceased attendance; or
- the midpoint of the payment period or period of enrollment for which Title IV assistance was disbursed if the student ceases to attend without official notification and withdrawal.

Tuition Liability and Refunds: Refunds for room and/or board, tuition and fees will depend on when the student withdraws from courses.

- For official withdrawals, the effective date of the withdrawal will determine the student tuition liability due or refund due to the student.
- For unofficial withdrawals, the student is responsible for all associated tuition charges and fees.

Transcripts and Grades: Transcript grades will depend on when the student withdraws from courses.

- For official withdrawals, a grade of W will be assigned for the course or courses and will appear on the student's transcript.
- For unofficial withdrawals, a grade of NC or F will be assigned for the course or courses and will appear on the student's transcript.

For both official and unofficial withdrawals, credits for the course or courses will be considered attempted but not earned.

Withdrawn courses or NC (No credit earned) grades do not affect a student's grade point average.

Students who change their enrollment status from full-time to part-time, or from full or part-time to below half-time, due to a partial drop or withdrawal, may have their federal, state, and/or University aid adjusted. The University may also be required to report the student's change in enrollment status to lenders, which can trigger the repayment of student loans. Students will be notified in these cases via writing.

Students will have their financial aid canceled if the student drops all courses and does not incur any liability, or fails to meet satisfactory academic progress standards as a result of the withdrawal. Financial aid for future terms may also be canceled. See Appeals for Late Drop or Withdrawal of Courses Policy and Satisfactory Academic Progress Policy for additional details.

The University is required to return funds for students who stop attending all courses before completing 60% of the term. The student will be notified by mail of the unearned amounts returned to the federal financial aid programs. The return of federal funds may result in a balance due to the University, particularly if the student previously received and cashed a refund check. See Return of Federal Funds Policy for additional details.

Students residing in on-campus housing must contact the Office of Residence Life upon withdrawal from the university. Students must follow proper check-out procedures and must vacate their campus housing within 48 hours of the effective withdrawal date. Students who drop or withdraw from a future term must vacate their campus housing after completion of finals. Room and board charges must be cancelled through the Office of Residence Life. Liability for these charges will be assessed at the time of cancellation.

Students who withdraw from all courses may be subject to readmission according to the University's Readmission Policy. Students who withdraw from the university must be in good financial standing in order to register for future classes or have access to their official and unofficial transcripts.

In accordance with National Collegiate Athletic Association (NCAA) regulations, all intercollegiate athletes must notify the Athletic Department and Office of Admissions when partially or fully withdrawing from the University.

In accordance with the U.S. Department of Veterans Affairs (VA) regulations, students receiving veteran's benefits must notify the VA Certifying Official in Office of Enrollment Services when partially or fully withdrawing from the University.

Appeals for Late Drop or Withdrawal

A student may appeal for permission to drop or withdraw from a course outside of the timeframes establish in the Adding or Dropping Courses Policy. The appeal may be made in person, by fax, or email by submitting a signed and completed Student Appeal Request Form along with the required documentation to the Office of the Enrollment Services by the appropriate appeals deadline. All appeal requests must be submitted by the student. Appeals submitted by a parent, legal guardian or spouse will be accepted only if the student is incapacitated.

REQUIRED DOCUMENTATION
A written statement from the student: must clearly state the request, the reason for the request and the type of resolution they are seeking. The statement must explain why the appeal request is justified. In addition, information regarding extenuating or unusual circumstances that impacted his/her

situation must be included. Supporting documentation: may include the following:

- Proof of attending another Institution
- Proof of deployment
- Death Certificate or obituary statement
- Documentation of medical diagnosis and visit dates
- Records of hospitalization, mental health or drug treatment
- Other supporting documentation supporting the inability to follow the normal drop/withdrawal deadlines

Maintenance of Matriculation

It is expected that students will fulfill the requirements for the degree by registering over successive semesters (excluding summer sessions), by attending classes, filing for a Leave of Absence, or by maintaining matriculation. A fee must be paid for each term in which a student maintains their matriculation.

Students approved for maintenance of matriculation can avail themselves of campus facilities and services (e.g., computer labs, library privileges). Maintenance of matriculation does not, however, extend the time limits specified under "Requirements for Degrees," and students should be aware that such status may affect their eligibility for financial aid.

Students must apply to an Enrollment Services representative for maintenance of matriculation prior to or during the registration period in a given semester. This matriculation status will be recorded on students' records as a "class" for zero credits.

Maintenance of matriculation is generally limited to two semesters. An extension beyond two semesters, due to extenuating circumstances, must be approved by the appropriate academic dean. Students who do not properly maintain their matriculation must apply for readmission to their academic program in accordance with procedures set forth in the academic catalogs.

Leave of Absence

LIU permits students to interrupt their studies when appropriate and if approved by the Pharmacy Dean. If granted, a leave of absence allows a student to continue under the requirements in effect when he/she was initially admitted.

A student who wants to interrupt their studies at the University for a temporary period (up to one year) may maintain degree status and ensure that his/her degree requirements will remain the same by taking a leave of absence. A degree candidate who is granted a leave of absence does not need to be readmitted to the University upon returning to their program of study. Students are not permitted to attend another college or university while on an official leave of absence. No financial aid or additional fees will be assessed during the leave of absence period.

A student must meet the following requirements to be eligible for a leave of absence:

- Be a degree-seeking ustudent;
- Be registered for the semester immediately prior to the beginning of the Leave of Absence;
- Be academically eligible to enroll;
- Have no holds (i.e. disciplinary or financial) which would restrict registration;
- Submit a formal written and signed Leave of Absence application form, which specifies the reason for the student's leave;
- Graduate and Professional students and students in certain cohort-based programs require department/dean approval to be indicated on the Leave of Absence form.

A Leave of Absence Application must be submitted to Enrollment Services prior to the start of the term for which the leave is requested. If a student has already enrolled for the semester for which a leave is being requested, they must drop all courses; if they do not, their courses will automatically be dropped upon approval of the Leave of Absence.

Leaves of Absence are granted for future terms only, and are not granted retroactively or in the middle of a term. In such exceptional cases where unforeseen circumstances occur after the start of a term, students are permitted to officially withdraw from the University according to the University's Official Withdrawal policy and appeal any charges assessed to their accounts, or receive incomplete grades that can be made up with the instructor(s). In all such cases where an official leave of absence is not granted, the University is required to perform a return of federal funds calculation for students receiving Title IV federal financial aid.

Federal student loan guidelines mandate that a student must return from an approved leave of absence within 180 days from the start date of the approved leave. When a student fails to return from a leave of absence, the student's withdrawal date will be reported to the National Student Clearinghouse and NSLDS as the date the student began the leave of absence. Upon returning from a leave of absence, the student may register for classes accordingly.

International students should know that immigration regulations may prohibit those who have been granted such a leave from maintaining their visa status.

Auditing of Courses

Auditing of courses (no earned credit or grade) is allowed only with the permission of the Assistant Dean of Student Academic and Professional Affairs. The audit fee is set at one-half the regular tuition fee, plus the full application fee for new students. On behalf of special programs of instruction, the Assistant Dean of Student Academic and Professional Affairs may authorize exceptions to the rules for auditing.

Transcript Requests

Official transcripts for professional and graduate schools, prospective employers, and other institutions must be requested and authrorized by the student. The university adheres to the Family Education Rights and Privacy Act of 1974. A student's record will not be released without prior consent from the student.

To request an official transcript the following procedures apply:

- Currently Enrolled Students - Login to the My LIU portal and select "Order Transcripts Online." Cost: $15.00 per transcript.
- Alumni or students not currently enrolled can order transcripts online through Parchment at www.parchment.com. You can submit a transcript request 24 hours/day, 7 days/week. Be assured that Parchment uses current web encryption technology and your information is secure. Cost: $15.00 per transcript.
- In-Person "On Demand" transcripts- Students may come to the campus Enrollment Services Office, show picture ID, and official transcripts can be printed on the spot. Cost: $25.00 per transcript.

Students who wish to release their transcripts to a third party for pick up must provide signature authorization for that request. The third party will be required to show a photo id.

Administrative Matters

Changes to Academic Records

Students have until the time of their graduation to have changes made to their academic records. Once a student has graduated, the academic record is frozen and cannot be changed retroactively.

Failure to Fulfill All Non-Academic Requirements

Students failing to fulfill all non-academic requirements (tuition, fees, library obligations, etc.) will be denied subsequent services, including issuance of diplomas.

Course Cancellations

The university reserves the right to cancel undersubscribed courses. When it does so, there is no fee charged to the student.

Changes of Address or Phone Number

A student must report changes of address or phone number to Enrollment Services or by updating the information directly at MyLIU.

POST GRADUATE YEAR 2 RESIDENCY PROGRAMS

LIU Pharmacy provides two ASHP-accredited PGY2 Pharmacy Residency Programs. The Emergency Medicine and Ambulatory Care programs each offer two positions and are conducted at The Brooklyn Hospital Center. In addition, LIU Pharmacy offers one postgraduate fellowship program in Infectious Disease Research.

GRADUATE PROGRAMS

LIU Pharmacy offers graduate curricula leading to the Doctor of Philosophy (Ph.D.) in Pharmaceutical Sciences (with specialization in pharmaceutics or pharmacology/toxicology), Master of Science (M.S.) in Pharmaceutics (with specialization in industrial pharmacy or cosmetic science), M.S. in Pharmacology and Toxicology, M.S. in Drug Regulatory Affairs, and M.S. in Pharmacy Administration.

PHARMACY LEADERSHIP INSTITUTE

Pharmacists are increasingly relied upon to assume leadership roles in patient care and health care organizations. Regardless of their title or formal position in the organization, pharmacists will have the opportunity to lead and set the direction. Pharmacists in the greater New York area regularly express an interest in additional pharmacy management training. Senior pharmacy leaders in the region have also expressed an interest in funding continuing pharmacy leadership education for emerging pharmacy leaders and middle managers to improve their transition into larger roles. Additionally, students continue to express an increasing interest in pharmacy leadership and management. As a result, the LIU Pharmacy designed a comprehensive series of progressive curricular leadership offerings for students.

The LIU School of Pharmacy has established a national reputation for excellence in developing leaders and are committed to the future development of pharmacists for management positions.

ADMISSION

Eligibility

1. Holders of the baccalaureate degree, or its equivalent, from an accredited college or university are eligible to apply for admission. The program specializations in Pharmaceutics usually require an undergraduate degree in pharmacy, chemistry, biology or a related science specialty. Certain courses in these programs have specific undergraduate prerequisites such as Organic Chemistry, General Physics, Calculus, Inorganic Chemistry, and Biology
2. The applicant must have an acceptable record in undergraduate studies (preferably a “B” average or better) as reflected in official transcripts of all colleges and universities attended. Attention is given to overall grade averages, grade trends during undergraduate study and areas of scholastic strength. Consideration is also given to the professional accomplishments of the applicant since the time of completion of undergraduate studies.
3. Applicants of M.S. Pharmacology/Toxicology must have completed the following prerequisites in order to be eligible for the program: Human Anatomy & Physiology, Biochemistry, and Pharmacology.

Admissions Procedures

Applicants are strongly encouraged to submit an application online at www.liu.edu/apply. A paper application may be obtained by visiting the Office of Admissions, LIU Brooklyn, 1 University Plaza, Brooklyn, NY 11201-5372, emailing bkln-gradadmissions@liu.edu, or by calling 718-488-1011. A bachelor’s degree (or its equivalent) from an accredited institution, indicating an acceptable record, is necessary to be considered for admission to the graduate programs. Additional requirements are described in the eligibility section above.

The completed application must be submitted with a personal statement of approximately 500 words. Applicants must also submit official transcripts from all colleges and universities attended showing all undergraduate and graduate coursework taken and degrees received, if any. Three completed letters of recommendation are required. A nonrefundable application fee is required. If the applicant mails or submits a paper application in person, they will be assessed a nonrefundable application fee. LIU Brooklyn encourages students to self-manage their application, which means it is the responsibility of the applicant to collect all required documents needed for admission and manage where documents are to be mailed. Students needing assistance and clarification are encouraged to email the Graduate Admissions Office at bkln-gradadmissions@liu.edu.

Most graduate programs are available each semester on a rolling admissions basis with applications accepted as long as space is available. However, it is strongly encouraged that applications and supporting materials be submitted as early as possible. Applications and all supporting documents from international applicants must be received by May 1st for fall admission and by November 1st for spring admission.

Applicants for all graduate pharmacy programs must submit GRE scores from the General Aptitude Test. For information on the GRE, contact the Educational Testing Service at GRE-ETS, P.O. Box 6000, Princeton, NJ 08541-6000 or at www.ets.org/gre.

A student will be classified as matriculant when accepted into a degree program. Students admitted with technical or academic deficiencies (e.g., incomplete official transcripts) will be classified as matriculants with conditions, pending the fulfillment of those conditions. Technical deficiencies must be removed before the end of the first semester of enrollment. Academic deficiencies must be satisfied before the completion of 12 credits required in the degree program or within one year. Students are in good academic standing as long as they are permitted to continue in attendance in matriculant status.

In addition, students holding a bachelor’s degree from accredited colleges and universities may be admitted as non-matriculated if the coursework is intended to help them in their jobs. Special Students must meet the same standards of admission as those admitted to degree candidacy. Granting Special Student status for either technical or academic reasons does not obligate the college to give such applicants matriculant status. Admission of a Special Student to matriculant status will depend upon the quality of all of the student’s credentials as well as performance in courses taken as a Special Student.

Notification of Acceptance

Students will be notified of the admissions decision shortly after all the necessary documents (application, transcript, official test score report and letters of recommendation) are received. Once a candidate is accepted, he or she is required to make a deposit of $500 to reserve a place in the entering class. This deposit is applied to the first semester’s tuition. It is not refundable should the student decide at a later date not to attend the LIU Brooklyn campus.

International Students

Applicants who are not citizens or permanent residents of the United States apply to LIU as international students. Applications for international admission should be submitted to the Office of Admissions.

Applicants should submit the below required material for consideration:

- Original official records of all secondary school and/or university work, including graduation certificate or equivalent. Official certified

translations in English are also required if the records are in a language other than English.
- Non-refundable application fee.
- Professional evaluation of their university credits from a NACES-member organization (www.NACES.org), if required.
- Official Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), or Pearson Test of English (PTE) scores.
- Portfolio or video audition (if required for admission into or scholarship consideration for particular programs).

Applicants may submit the below optional material for consideration:
- SAT or ACT scores may be submitted admission. Test scores may be submitted in lieu of language testing scores.
- Recommendation from one teacher or guidance counselor.

Each applicant is considered through a review of their application and supporting material.

Language Proficiency may be determined based on the criteria below:
- TOEFL score for undergraduate: 75 (Some academic programs may require a higher score or previous university-level academic coursework in the United States.)
- Minimum IELTS score for admission: 6.0
- SAT or ACT
- ELS 112 completion certificate

Admitted students who intend to apply for an F-1 student visa must also submit an I-20 application and supporting documentation showing that the student or sponsor is willing and able to undertake the approximate costs of education and living expenses. A copy of a valid passport is also required. Upon acceptance, eligible students are sent a “Certificate of Eligibility for Nonimmigrant (F-1) Student Status” (also called a Form I-20). This form may be used to apply for an F-1 entrance visa to the U.S. issued by American embassies abroad.

International students are required to submit their LIU tuition deposit in order to receive their I-20. Once students receive their I-20 released by LIU they are able to begin the process of obtaining an F-1 visa to study in the United States.

For detailed information on immigration policy and maintaining F-1 status, international students should familiarize themselves with the LIU International Student Handbook.

Transfer Credits

Graduate courses taken at another accredited college or university before admission to LIU may, at the discretion of the academic program chair/director and if pertinent to the plan of study, be credited to the graduate degree. The following criteria apply:

- Permission to transfer such credits must be requested at the time of admission, and official transcripts must be submitted to the office of LIU Admissions.
- Transfer credit toward the master’s degree is normally limited to six semester hours, for courses in which the student has received a grade of B or better (or the equivalent if another grading system was used).
- Transfer coursework is not recorded as part of the LIU grade point average (GPA).

Courses taken at another university after admission to a graduate program at LIU may not be used for transfer credit unless prior written permission is obtained from the academic program chair/director.

New York State Immunization Law

In accordance with the New York State Department of Health, the following immunizations are required at Long Island University:

Measles, Mumps, and Rubella (MMR): In accordance with New York State Public Health Law § 2165, all students born on or after January 1, 1957 and are enrolled for at least six (6) credits or more are required to provide Long Island University with certified proof of vaccination from a health care provider.
Meningococcal Disease (Meningitis): In accordance with New York State Public Health Law § 2167 all students enrolled for at least six (6) credits or more are required to provide the University with certified proof of vaccination within the past 10 years from a health care provider.
Rabies Vaccine: In accordance with CDC recommendations, all students enrolled in the College of Veterinary Medicine are required to provide the University with certified proof of rabies pre-exposure prophylaxis (PreP) vaccination and proof of continued compliance during their enrollment at the University.

Students may request a medical or religious exemption from any of the vaccination requirements set forth above by submitting documentation in writing to the Center for Healthy Living, the department responsible for the collection and validation of immunization documents.

Proof of immunization, or documentation for exemption, must be submitted on the Immunization Portal prior to the beginning of beginning the first semester of classes.

The University reserves the right to impose additional immunization requirements in collaboration with local and state health directives or recommendations.

ADDITIONAL GRADUATE ACADEMIC POLICY

Academic Standards

The college reserves the right to dismiss, at any time, a student whose academic record is unsatisfactory. To be in good academic standing, a student must make appropriate progress toward fulfilling all requirements of the graduate program (M.S. or Ph.D.) in which he/she is enrolled. Failure to do so will be cause for dismissal. Academic probation is the initial official act for a student failing to make satisfactory progress. Students will be duly notified by the program director that they have been placed on probation.

A graduate student will be placed on probation for:

1. failure to maintain an overall cumulative grade-point average (GPA) of 3.000 and/or,
2. earning a grade of C+ (or less) in more than two courses (these courses may be repeated with the permission of the program director and associate dean).

A graduate student will be dismissed from the program for:

1. failure to rectify probationary status (i.e., obtaining a GPA of 3.000) within two semesters.
2. receiving an “F” grade in any course.
3. failure on comprehensive examination (for both students in the M.S. and Ph.D. programs). Note: A student may take the comprehensive examination only once. However, the student may appeal the dismissal decision after the failed attempt as explained below.

A student may appeal an academic dismissal once by petition to the associate dean of the college. The petition should present a thorough analysis by the student of the reasons for having failed to maintain satisfactory academic progress and a comprehensive plan for rectifying his/her deficiencies within a reasonable period of time, preferably after one semester of study but not exceeding two semesters of study, and that conforms with all other academic regulations of the college. The petition is considered by the associate dean who may request that the student appears in person to substantiate his/her position and answer questions. Students are advised that successful appeals of academic dismissals are rare and usually occur only in those circumstances where substantive underlying causes for unsatisfactory academic progress were previously unknown to the college. Generally, in cases where substantive underlying causes exist for unsatisfactory progress, an extension of academic probation will have been granted to allow the student additional opportunity to remedy his/her noncompliance with satisfactory academic progress. Decisions of the associate dean that a student believes may demonstrate arbitrary and capricious treatment or to be fundamentally unfair may be appealed, as a final step, to the dean of LIU Pharmacy.

Related Curricular Matters

Change of Plan

A student desiring to transfer from one LIU Pharmacy graduate program to another must be formally accepted by the program director of the graduate program to which admission is sought and by the associate dean. The student is expected to notify the program director of the program that he or she is leaving.

Repeating Courses

Students may repeat any course with the permission of their advisors. To repeat a course more than once, they must have the permission of the program director and associate dean. Credit will be earned only once, and the second grade—whether higher or lower—will be computed in the student’s average. After a student takes a course a second time, all grades except the first will be computed in the student’s average.

Cancellation of Courses

LIU Pharmacy reserves the right to cancel undersubscribed courses or courses for which no faculty are available to teach. When it does so, there is no program change fee.

Time Limit

The M.S. curricula are projected for completion within a two-year period.*

For the period of study for the doctoral programs, students should consult the program (see Graduate Curriculum). Nine credits are considered a full-time load for academic purposes. Full-time enrollment status for graduate students for all federal and state financial aid programs is defined as 12 credits per semester. Permission of the program director is required to carry more than 12 credits.

**While all academic and other requirements for the degree of Master of Science can be completed in two semesters and summer work, the maximum allowable time for the completion of all requirements and the awarding of the degree is five years from the date of first matriculation (exclusive of time spent in the armed forces), unless the associate dean approves an extension. The maximum allowable time for the completion of all requirements for the doctoral degree is eight years from the date of first matriculation unless the associate dean approves an extension. Any course outside the time limit will not count as credits toward the degree unless approved in writing by the appropriate program director and associate dean.*

Changes on Academic Records

Students have until the time of their graduation to have changes made to their academic records. Once a student has graduated, the academic record is frozen and cannot be changed retroactively.

GRADUATION REQUIREMENTS

Master of Science students may elect either a Thesis Option or Non-Thesis Option (see below). Doctoral students should consult the program for the Plan of Study (see Graduate Curriculum).

The responsibility for properly fulfilling the requirements for degrees rests entirely with the student. Students generally meet the requirements announced in the graduate section of the LIU Pharmacy Bulletin for the academic year in which they were matriculated or readmitted. Students for whom graduation requirements change during their progress to a degree may, with the permission of the Vice Dean, choose requirements in effect at the time of admission or those in effect at the end of the course of study.

Exceptions to the provisions of this section of this bulletin may be made only with the prior written sanction of the associate dean on the recommendation of the appropriate program director.

Thesis Option

1. Completion, with a minimum cumulative GPA of 3.000, the required curriculum in the designated area of specialization, and 6 credits of research and thesis.
2. Completion of a Master's Thesis which demonstrates the candidate's ability to select, organize and present the results of investigations in his or her field of specialization. The following general information is intended for the student's guidance in the preparation of the thesis:
   - The student should have completed at least 12 credits toward the degree before submitting a proposal.
   - The student should obtain the latest copy of Supplementary Information and Suggestions Concerning the Master's Degree Thesis and Proposal from the Office of Graduate Studies.
   - The approval of the program director must be obtained for the thesis after the submission of the proposal.
   - The sponsoring committee must consist of three members of the graduate faculty of whom two must be from the full-time graduate faculty. The chair of the committee may be selected by the student or appointed by the program director.
   - The chair of the sponsoring committee supervises the student during the period of thesis preparation.
   - Upon completion of the thesis, all members of the sponsoring committee must read and approve the thesis before acceptance.
   - The subject of the thesis should be of significance and the completed manuscript should be representative of a high degree of scholarly attainment.
   - Students must conform to the submission dates in the thesis proposal outline and the dates given in the calendar of this bulletin.
   - The student is required to make an oral defense of the thesis before the sponsoring committee.

NOTE: Thesis Option students enrolled in the M.S. in Pharmaceutics with specialization in Industrial Pharmacy must also successfully pass a written comprehensive examination in addition to the completion of the Thesis.

Non-Thesis Option

1. Completion, with a minimum cumulative GPA of 3.000, of the required curriculum in the designated area of specialization.
2. Passing a written comprehensive examination. This examination will be given twice annually, generally in early December and late April. Dates may be obtained from the Office of Graduate Studies.

Note: Students should refer to the information on individual Master of Science programs in the Graduate Curriculum section of this bulletin for specific information and coursework requirements in each area of specialization, and for information regarding any other degree requirements that may pertain to their areas of specialization.

Comprehensive Examination for Master's Students

Passing the comprehensive exam at the master's level is required for the M.S. degree for non-thesis students enrolled in the Pharmacology and Toxicology, Pharmaceutics with Specialization in Cosmetic Science, Drug Regulatory Affairs and Pharmacy Administration programs. Passing the comprehensive exam at the master's level is required for the M.S. degree for all students (thesis and non-thesis) enrolled in the Pharmaceutics with Specialization in Industrial Pharmacy program.

The Comprehensive Examination Process
The comprehensive examination is given twice each year, generally in early December and late April. Students should apply for the comprehensive exam in their final semester. Students should contact the coordinator of graduate programs for forms, application deadlines and examination dates.

Eligibility Requirements
1. Students must have a cumulative GPA of 3.000 or above.
2. Students must be in the process of completing all of their required coursework for their degree in the semester in which they are planning to take the examination.

Passing Scores
A score of 75 or higher is required to pass the examination.

If a student has not successfully completed his/her coursework in the semester during which he/she takes the exam, he/she will have to repeat the coursework and re-take the exam.
As a matter of policy, Comprehensive exams cannot be reviewed.

Reporting of the Scores
The Office of Graduate Programs shall inform students, in writing, of their scores.

GRADUATE CURRICULUM

Division of Pharmaceutical Sciences

All graduate programs are offered through LIU Pharmacy's Division of Pharmaceutical Sciences. 718-488-1101

Doctor of Philosophy in Pharmaceutics

Program Description

Students develop an ability to conduct independent research and are much sought-after in industry and academia. Graduates with a Ph.D., depending on their specialization, might go into industry or accept a position as a post-doc in various institutions across the country. Students may pursue work in the following:

- Formulation and Analytical Science
- Pharmacokinetics
- Contract Manufacturing
- Pharmacology
- Toxicology
- Post-Doc and Academics

Program Mission

The Ph.D. in Pharmaceutical Sciences at Long Island University is designed to prepare students to meet the challenges and the current needs of scientists engaged in the pharmaceutical sciences and drug development process. The program offers a blend of didactic and laboratory courses in biopharmaceutics/pharmacokinetics, pharmacology/toxicology and pharmacogenomics, and other areas related to academic and industrial research. After completing a broad-based core of fundamental courses, all students are required to perform original research in a specialized area, culminating in a dissertation. The program is designed so Ph.D. students have considerable flexibility in selecting areas of research for the Ph.D. project. The program is developed to help students obtain skills in experimental design, research methodology, and scientific communication in preparation for research opportunities in academia, government laboratories, and the pharmaceutical industry.

The Ph.D. in Pharmaceutical Sciences requires students to complete 69 credits of coursework, choosing one of two specialization tracks: Pharmaceutics or Pharmacology/Toxicology. This includes 36 credits of coursework in the M.S. Program in Pharmaceutics or the M.S. Program in Pharmacology/Toxicology. Admission to the Ph.D. The program requires successful completion of the M.S. phase of the LIU program or completion of a non-LIU M.S. in which the same course material is covered. Students may bypass the M.S. degree and continue toward the Ph.D. degree, but only after completing M.S.-level coursework and passing the Ph.D. Qualifying Exam.

Program Goals and Objectives

Goal 1: Design, conduct and defend original research in one's field of expertise.

1.1 Integrate advanced knowledge and concepts in pharmaceutical sciences to identify a research problem and to develop an appropriate hypothesis and design experiments to study the problem.

1.2 Demonstrate technical skills involving computer, laboratory, and other measurements necessary to be a productive scientist.

1.3 Analyze experimental data and compare results to theoretical predictions.

1.4 Effectively disseminate and defend one's research both orally and in writing.

Goal 2: Apply analytical and critical thinking in reviewing scientific literature and evaluating research findings.

2.1 Read, accurately interpret, and critically analyze procedures (including error identification), results and conclusions from discipline-specific published research.

2.2 Identify potential errors in and limitations of key research studies related to one's research focus, including studies conducted by the student.

REQUIREMENTS FOR THE PH.D. DEGREE

[Program Code: 93195] {HEGIS: 1211}

Students will choose from two Ph.D. Pharmaceutical Sciences tracks: Pharmaaceutics or Pharmacology/Toxicology. Students must complete a minimum of 69 credits of coursework, including 36 credits of M.S.-level work foundational to the track's specialty, four semesters of PHS 998 (Ph.D. Research and Thesis), submit a satisfactory dissertation proposal, submit a satisfactory written dissertation, and succesfully defend (orally) the dissertation.

A written comprehensive examination is required after completing the core (required) courses listed in the M.S.-level course load of the selected track. Students must successfully pass this examination to qualify for continuation in the Ph.D. program. Below are listed the remaining core classes after the M.S.-level course load and successful completion of the comprehensive examination.

Ph.D. Pharmaceutical Sciences: Pharmaceutics Track

Required Courses *(24 credits*)

PHS	936	Dosage Form Design	3.00
PHS	997	Solid State Characterization	3.00
PHS	998	Research and Thesis (4 semesters)	12.00
PTM	712	Scientific Writing	3.00
PTM	923	Advanced Medicinal Chemistry	3.00

Elective Courses *(9 credits)*

Students select three (3) electives from the list of graduate electives

Ph.D. Pharmaceutical Sciences: Pharmacology/Toxicology Track

Required Courses *(24 credits*)

PHS	936	Dosage Form Design	3.00
PHS	998	Research and Thesis (4 semesters)	12.00
PTM	712	Scientific Writing	3.00
PTM	923	Advanced Medicinal Chemistry	3.00
PTM	924	Clinical Pharmacology and Toxicology	3.00

Elective Courses *(9 credits)*

Students select three (3) electives from the list of graduate electives

Students in all graduate programs may choose from the elective courses listed below - program advisor approval may be required. Additional courses may be substituted for elective credit upon the approval of the program advisor.

With the approval of the program advisor, students choose elective courses from the list below. A course may not be offered for a given semester unless the minimum enrollment requirement is met. Additional courses may be substituted for elective credit upon faculty approval.

CHM	581	Computational Chemistry	3.00
CHM	606	Advanced Physical Chemistry	3.00
PHS	070	Special Problems	3.00
PHS	769	Transdermal Drug Delivery	3.00
PHS	880	Thermal Physics and Applications to the Chemistry of Pharmaceutical Systems I	3.00
PHS	881	Thermal Physics and Applications to the Chemistry of Pharmaceutical Systems II	3.00
PHS	886	Computational Methods of Data Analysis	3.00
PHS	887	Pharmacokinetic/Pharmacodynamic Modeling and Simulation	3.00
PHS	937	Pharmaceutical Engineering	3.00
PHS	950	Cosmetic/Dermatological Formulations and Technology I	3.00

PHS	951	Cosmetic/Dermatological Formulations and Technology II	3.00
PHS	955	Integrated Dosage Form Development	3.00
PHS	958	Aerosol Science and Technology	3.00
PHS	960	Properties/Applications of Cosmetic and Pharmaceutical Raw Materials	3.00
PHS	975	Physiologically Based Pharmacokinetic Modeling and Simulation–Theory and Application	3.00
PHS	976	Drug Metabolism and Disposition	3.00
PHS	979	Design of Peptide and Protein Drug Delivery Systems	3.00
PHS	982	Science and Technology of Controlled Release Systems	3.00
PHS	988	Oral Absorption and Drug Development	3.00
PHS	989	Special Topics in Pharmaceutics	3.00
PHS	991	Solubility and Complex Equilibria	3.00
PHS	992	Transport Phenomena and Drug Delivery I	3.00
PHS	993	Kinetics and Mechanisms of Drug Degradation	3.00
PHS	995	Transport Phenomena and Drug Delivery II	3.00
PHS	996	Interfacial Phenomena	3.00
CHE	621	Advanced Organic Chemistry I	3.00
MTH	610	Differential Equations I	3.00
PHA	010	Biostatistics	3.00
PHA	050	Research Methodology	3.00
PHA	060	Research and Thesis	3.00
PHA	070	Special Problems	3.00
PHA	601	Marketing Research and Analysis	3.00
PHA	603	Drug Regulatory Affairs	3.00
PHA	604	Pharmacoeconomics	3.00
PHA	606	Sales Management	3.00
PHA	615	Consumer Behavior and Contemporary Healthcare Issues	3.00
PHA	617	Pharmaceutical Laws and Enforcement	3.00
PHA	618	Patent Law and the Pharmaceutical Industry	3.00
PHA	645	Internship in Drug Regulatory Affairs	3.00
PHA	651	Pharmaceutical Labeling, Advertising, and Promotion	3.00
PHA	653	Seminar in Social and Administrative Sciences	3.00
PHA	654	FDA Regulation of Over-the-Counter Drugs, Medical Devices, and Dietary Supplements	3.00
PHA	655	Chemistry, Manufacturing, and Controls (CMC) Regulatory Affairs	3.00
PHA	657	Principles and Practices of Regulatory Compliance and Enforcement	3.00
PHA	658	International Drug Regulatory Affairs	3.00
PHA	660	Mechanics of Preparing INDs and NDAs	3.00
PHA	661	The American Pharmaceutical Industry	3.00
PHA	665	Healthcare Data Management and Analysis	3.00
PHS	060	Research and Thesis	3.00
PHS	601	Pharmaceutical Calculus	3.00
PHS	602	Pharmaceutical Regulatory Overview	3.00
PHS	702	Physical Chemistry II	3.00
PHS	931	Advanced Physical Pharmacy I	3.00
PHS	932	Advanced Physical Pharmacy II	3.00
PHS	934	Principles of Industrial Pharmacy I	3.00
PHS	935	Principles of Industrial Pharmacy II	3.00
PHS	936	Dosage Form Design	3.00
PHS	952	Cosmetic/Dermatological Formulations and Technology Laboratory	3.00
PHS	972	Methods of Pharmaceutical Analysis	3.00
PHS	983	Polymer Science	3.00
PHS	987	Advanced Biopharmaceutics and Pharmacokinetics	3.00
PHS	990	Pharmacokinetic Modeling	3.00
PHS	997	Solid State Characterization	3.00
PTM	060	Research and Thesis	3.00
PTM	070	Special Projects	3.00
PTM	704	Autonomic Pharmacology	3.00
PTM	705	Biochemical Pharmacology	3.00
PTM	708	Cardiovascular Pharmacology	3.00
PTM	709	Advanced Pharmacology	3.00
PTM	711	Current Technologies in Pharmaceutical Research and Development	3.00
PTM	712	Scientific Writing	3.00
PTM	743	Human Carcinogenesis	3.00
PTM	802	Experimental Methods in Pharmacology and Toxicology	3.00
PTM	804	Inborn Errors of Metabolism	3.00
PTM	905	Principles of Immunotherapy	3.00
PTM	907	Psychopharmacology	3.00
PTM	910	Toxicology of Drugs and Chemicals	3.00
PTM	917	Molecular Toxicology	3.00
PHM	920	Molecular Pharmacology	3.00
PTM	921	Medicinal Chemistry and Drug Design	3.00
PTM	923	Advanced Medicinal Chemistry	3.00
PTM	924	Clinical Pharmacology and Toxicology	3.00
PTM	925	Pharmacogenomics	3.00
PTM	938	Stem Cells and Regenerative Medicine	3.00

Master of Science in Pharmaceutics

Program Description

Graduates from this program are in great demand and fill vital positions in various pharmaceutical and cosmetic industries. They are sought after by pharmaceutical and cosmetic companies, contract research organizations, OTC companies and various analytical labs. Their strong background makes them ideal candidates to fulfill the growing demands in these industries. Employment fields include the following:

- Formulation
- Pharmacokinetics
- Manufacturing
- Analytical
- Quality Assurance
- Quality Control

Students will choose from two M.S. Pharmaceutics tracks: Industrial Pharmacy or Cosmetic Science.

Specialization in Industrial Pharmacy

Program Mission

The mission of the Master of Science in Pharmaceutics with specialization in Industrial Pharmacy is to uniquely prepare students for entry into the pharmaceutical industry and for entry to the Ph.D. programs in pharmaceutical sciences and other related fields. Graduates of the program will be highly sought after by the global pharmaceutical industry to support research, development and manufacturing operations.

Alumni should become positioned to assume leadership roles within the pharmaceutical industry as well as within academia, further elevating the stature of the Division of Pharmaceutical Sciences, LIU Pharmacy and of the university as a whole.

Program Goals and Objectives

Goal 1: Demonstrate acquisition of knowledge of fundamental concepts in pharmaceutics/industrial pharmacy.

1.1 List and explain physical and chemical properties of solvents and solutes that affect solubility, stability, and other biopharmaceutic properties/behaviors used in the development of dosage forms.

1.2 Describe the important factors necessary for the design, manufacture and evaluation of various dosage forms and other drug delivery systems.

1.3 Develop, validate and apply different instrumental analytical techniques toward the analysis of drug substances in various dosage forms.

1.4 Identify and explain the principles that govern absorption, distribution, metabolism and excretion of drug substances, and the factors that influence these processes.

Goal 2: Integrate advanced knowledge and concepts in pharmaceutical sciences.

2.1 Demonstrate the ability to interpret and analyze data.

2.2 Design, manufacture and evaluate dosage forms and other drug delivery systems.

2.3 Characterize and evaluate the physicochemical properties of pharmaceutical materials.

Goal 3: Effectively communicate scientific information both orally and in writing to inform and educate professional and scientific peers.

3.1 Retrieve, analyze, and interpret the scientific literature to provide information for dissemination orally or in writing.

3.2 Verbally deliver information in an organized, persuasive and logical manner using supportive documentation and visual aids.

3.3 Create documents that are technical, analytical, relevant in content and well organized.

Goal 4: Develop group dynamic and teamwork abilities.

4.1 Demonstrate one's personal contributions to group projects or assignments.

4.2 Summarize information gleaned from group experiences and communicate findings.

Specialization in Cosmetic Science

Program Mission

The mission of the Master of Science in Pharmaceutics with specialization in Cosmetic Science is to uniquely prepare students for entry into the cosmetics industry and other related fields. Graduates of the program will be highly sought after by the global cosmetics industry to support research, development and manufacturing operations in the areas of chemistry, cosmetic/dermatological formulations technology, product evaluations and safety. Alumni should become positioned to assume leadership roles within the cosmetics industry.

Program Goals and Objectives

Goal 1: Develop the expertise and skills necessary for the design, manufacture and evaluation of various cosmetic and dermatological products.

1.1 Perform calculations necessary to scale-up a dermatological formulation;

1.2 List the challenges involved in formulation and preparation of dermatological products;

1.3 Design set of experiments necessary to develop a dermatological product;

1.4 Evaluate final dermatological product based on in-vitro experiments;

1.5 Identify tests necessary to conduct in-vitro testing of dermatological products.

Goal 2: Demonstrate ability to develop, validate and apply different instrumental analytical techniques to analyze various cosmetic and dermatological products.

2.1 Describe how to validate analytical methods;

2.2 Be able to select appropriate column for HPLC analysis;

2.3 Perform calculations necessary to determine the concentration of an analyte in given sample;

2.4 Select the appropriate method for quantitative measurement of analyte concentration.

Goal 3: Use physical chemical principles involved in development of dermatological dosage forms.

3.1 Identify appropriate ingredients to formulate a cosmetic dosage form;

3.2 Demonstrate the ability to conduct stability testing of different dermatological formulations;

3.3 Apply physiochemical principles to develop dermatological products;

3.4 Utilize rheological parameters for packaging of dermatological formulations;

3.5 Understand principles underlying behavior of various types of surfactants;

3.6 Understand properties of preservatives and their application.

Goal 4: Develop the oral and written communication skills necessary to inform and educate professional and scientific peers.

4.1 Demonstrate the ability to write scientific documents;

4.2 Demonstrate ability to present scientific findings orally.

M.S. Pharmaceutics - Requirements

[Program Code: 77047] {HEGIS: 1211}

Requirements for the Industrial Pharmacy track:

Students taking the Non-Thesis Option must complete 36 credits of coursework and pass the written comprehensive examination. Students taking the Thesis Option must complete 36 credits of coursework of which 6 credits are for PHS 080 Research and Thesis, pass the written comprehensive examination, submit a satisfactory thesis proposal, submit a satisfactory written thesis, and successfully defend (orally) their written thesis.

The following courses are required for the Industrial Pharmacy track:

PHS	602	Pharmaceutical Regulatory Overview	3.00
PHS	931	Advanced Physical Pharmacy I	3.00
PHS	932	Advanced Physical Pharmacy II	3.00
PHS	934	Principles of Industrial Pharmacy I	3.00
PHS	935	Principles of Industrial Pharmacy II	3.00
PHS	601	Pharmaceutical Calculus	3.00
PHS	972	Methods of Pharmaceutical Analysis	3.00
PHS	987	Advanced Biopharmaceutics/Pharmacokinetics	3.00
PHA	010	Biostatistics	3.00

Students selecting the Thesis Option must register for the following course:

PHS	80	Research And Thesis	6.00

Additional electives are listed under the description of the Ph.D. program.

Requirements for the Cosmetic Science track:

Students taking the Non-Thesis Option must complete 33 credits of coursework and pass the written comprehensive examination. Students taking the Thesis Option must complete 33 credits of coursework of which 6 credits are for PHS 060 Research and Thesis, submit a satisfactory thesis proposal, submit a satisfactory written thesis, and successfully defend (orally) their written thesis.

The following courses are required for the Cosmetic Science track:

PHA	010	Biostatistics	3.00
PHS	950	Cosmetic/Dermatological Formulations and Technology I	3.00
PHS	951	Cosmetic/Dermatological Formulations and Technology II	3.00
PHS	952	Cosmetic/Dermatological Formulations and Technology Laboratory	3.00
PHS	960	Properties/Applications of Cosmetic and Pharmaceutical Raw Materials	3.00
PHS	602	Pharmaceutical Regulatory Overview	3.00
PHS	761	Quality-by-Design and Process Validation	3.00
PHS	760	Dermal and Transdermal Drug Products: Development and Regulation	3.00
PHS	953	Color In Cosmetic Delivery Systems	3.00

Students selecting the Thesis Option must register for the following course in two consecutive semesters:

PHS	060	Research And Thesis	3.00

Additional electives are listed under the description of the Ph.D. program.

Master of Science in Pharmacology / Toxicology

Program Description

Career opportunities and employment may include academic departments involved in research, development, and teaching. Rewarding careers are also possible in pharmaceutical companies, government laboratories and agencies including the Centers for Disease Control, The Food and Drug Administration, the Department of Agriculture, and the Department of Defense.

Opportunities also exist in areas involving the development of public policy, investment advising, patent law, and scientific writing and editing.

There is excellent potential for rapid advancement in this field due to the importance of the discipline to the drug industry, regulatory agencies, and the general public.

Graduates of the program have either joined academic departments by securing doctoral fellowships in prestigious laboratories or obtained jobs in the industry. Others have used their degree to facilitate entry into medical and pharmacy schools.

Employment opportunities may include:

- Designing and performing laboratory experiments
- Managing research projects
- Reviewing scientific documents and making recommendations
- Writing scientific communications and papers for publication and non-publication purposes
- Oral communication of scientific findings

In addition to strong scientific background and analytical skills, the successful candidate will also need to possess excellent interpersonal and communication skills and high ethical standards.

Program Mission

LIU Pharmacy's M.S. in Pharmacology and Toxicology degree program prepares student lifelong learners with the knowledge and abilities required for competitive technical positions in pharmacological research and testing, for participating in clinical trials, and for performing toxicological reviews and assessments in the pharmaceutical and biotechnology industries as well as in academic and governmental research laboratories. Additionally, graduates are well-positioned to continue their studies in Ph.D. programs in pharmacology and other biomedical sciences, while other graduates may find the program ideal for improving their credentials toward gaining admission to medical school or other health professional programs.

Students will: a) demonstrate a mastery of a broad didactic foundation in pharmacology and toxicology; b) develop research skills through exposure to significant research opportunities and experiences during which they translate their knowledge base into practice; and c) utilize professional skills such as statistical analysis, written and verbal communication. These abilities will be acquired through specific coursework, labs, seminars, and other professional and personal development offered during the course of study.

Program Goals and Outcomes

At the end of the program students will:

Goal 1: Apply the knowledge of mechanisms of action of drugs and toxicants to discuss the clinical profile of pharmacological agents.

1.1. Discuss the mechanisms of action of selected drugs/toxicants at the molecular, cellular, organ system, and whole-body level;

1.2. Discuss the toxicity of drugs based on the physiology and the pathophysiology of the disease;

1.3. Assess and evaluate therapeutic and/or toxic outcomes based on the knowledge of drugs/toxicants' accessibility to target sites.

Goal 2: Apply the knowledge of pharmacokinetic and pharmacodynamic processes and principles to discuss therapeutic and toxic outcomes of pharmacological agents.

2.1. Apply the pharmacokinetic processes to discuss the absorption, distribution, metabolism, and excretion of drugs/toxicants;

2.2. Apply the pharmacodynamic principles to discuss a drug's affinity, potency, and efficacy;

2.3. Evaluate the impact of pharmacokinetic processes on the action of drugs/toxicants and their clinical/toxic outcomes;

2.4. Use the pharmacodynamic principles to discuss the mechanism of action of drugs/toxicants and clinical/toxic outcomes;

2.5. Use appropriate concepts, principles, and analysis skills to address drug efficacy/toxicity queries;

2.6. Discuss the clinical uses and the safety profile of various classes of drugs;

2.7. Solicit appropriate information required to address drug efficacy/toxicity queries.

Goal 3: Develop oral and written communication skills necessary to disseminate scientific information.

3.1. Orally communicate sound evaluations of discipline-specific, peer-reviewed papers;

3.2. Demonstrate verbal communication skills during seminar presentations and the thesis defense;

3.3. Demonstrate the ability to write scientific reports and evaluations in the area of study;

3.4. Develop proficiency in writing abstracts;

3.5. Demonstrate the ability to write a research project;

3.6. Write a thesis dissertation based on data obtained during laboratory training and investigation.

Goal 4: Retrieve, analyze, interpret, and critique scientific literature in pharmacology and toxicology.

4.1. Conduct a literature review independently using appropriate keywords, databases, and select pharmacology and toxicology peer-reviewed papers that pertain to a specific problem;

4.2. Analyze, interpret, and critique the scientific literature with regard to study design, data interpretation, and appropriateness of conclusions.

Goal 5: Develop the skills needed to perform analytical and experimental techniques, and research methodology.

5.1. Develop an experimental technique based on one's own research area;

5.2. Design experiments using pharmacological and toxicological tools to investigate a specific research area;

5.3. Develop and validate research methodologies to investigate specific research questions.

Goal 6: Identify research opportunities, develop hypotheses and design research projects, and execute independent research. (Thesis option students).

6.1. Demonstrate the ability to carry out experiments in a laboratory setting;

6.2. Demonstrate the ability to design experimental protocols;

6.3. Statistically analyze and generate graphics of the data and interpret experimental findings;

6.4. Demonstrate the ability to conduct a literature search for a specific area of investigation;

6.5. Identify areas of unsolved investigation; develop hypotheses and research questions.

Undergraduate Prerequisites:
Biochemistry, Physiology and Pharmacology

M.S. in Pharmacology/Toxicology - Requirements

[Program Code: 26233] {HEGIS: 0414}
Students taking the Non-Thesis Option must complete 36 credits of coursework and pass the written comprehensive examination. Students taking the Thesis Option must complete 36 credits of coursework of which 6 credits are PTM 060 Research and Thesis, submit a satisfactory thesis proposal, submit a satisfactory written thesis, and successfully defend (orally) their written thesis.

Courses required for the M.S. in Pharmacology/Toxicology degree

PHA	010	Biostatistics	3.00
PTM	020	Seminar In Pharmacology/Toxicology	3.00
PTM	704	Autonomic Pharmacology	3.00
PTM	705	Biochemical Pharmacology	3.00
PTM	709	Advanced Pharmacology	3.00
PTM	802	Experimental Methods in Pharmacology and Toxicology	3.00
PTM	910	Toxicology of Drugs and Chemicals	3.00
PTM	925	Pharmacogenomics	3.00

Students selecting the thesis option must register for the following course in *two consecutive semesters*:

PHS	060	Research and Thesis	3.00

Additional electives are listed under the description of the Ph.D. program.

Master of Science in Drug Regulatory Affairs

Program Description
With pressure to contain the cost and time it takes to create new products and bring them to market, professionals with expertise in regulatory affairs are highly sought after by pharmaceutical companies and medical device manufacturers, as well as by hospitals, health maintenance organizations (HMOs) and a range of other healthcare-oriented organizations as well. The expertise of a DRA professional may be used in areas such as clinical trials, manufacturing, compliance, patenting, sales and marketing, IT, finance and scientific writing.

Employment opportunities include:
- Collecting data and preparing submissions to regulatory agencies
- Assisting in the development of procedures to ensure regulatory compliance
- Interfacing with regulatory agencies
- Facilitating identification and resolution of scientific and regulatory issues with regulatory agencies
- Remaining current with federal and international regulations and communicating that information within the organization, including the creation of training materials
- Participating in the development of new products and services
- Participating in quality audits

In addition to a strong background in pharmaceutical science and regulatory affairs, a successful DRA professional should have excellent interpersonal and communication skills, high ethical standards, attention to detail and strong organizational skills.

Program Mission
The mission of the Master of Science program in Drug Regulatory Affairs is to prepare students to become lifelong learners and leaders in a variety of settings including biotechnology, medical devices, pharmaceuticals, consulting arena, and liaise with government and regulatory agencies worldwide. Students will: a) demonstrate a mastery of a broad didactic foundation in regulatory affairs gained in advanced coursework; b) develop strong skills through exposure to significant regulatory projects and case studies during which they translate their knowledge into practice; and c) utilize professional skills such as statistical analysis, knowledge of regulatory guidance documents, and written and verbal communication skills.

These abilities will be acquired through specific coursework and seminars and other professional and personal development offered during the course of study.

Program Goals and Objectives

Goal 1: Demonstrate an understanding of the role of a medical products regulatory affairs specialist and the dynamic nature of the regulatory field.

1.1 Evaluate real and/or simulated regulatory submissions for appropriateness of the submission to the regulatory requirements of product design, manufacturing, testing, and post-market surveillance strategies.

1.2 Examine real or simulated regulatory submissions to judge adherence to prescribed guidance documents and principles of responsible clinical research.

1.3 Identify the differences between patents, trademarks, and trade secrets as they relate to regulatory and marketing strategy.

Goal 2: Identify and utilize the laws and regulations that apply to the development, testing, and production of new medical products, including medical devices, in-vitro diagnostics (IVDs), pharmaceuticals, biotechnology-derived therapeutics, and biologics.

2.1 Assess current U.S. Food and Drug Administration (FDA) regulations that focus on drugs and medical devices and their impact on regulatory submissions such as New Drug Applications (NDA), Abbreviated NDAs, Investigational New Drug (IND) applications, 510k, and Pre-Market Authorizations (PMAs).

2.2 Delineate specific regulations in the Code of Federal Regulations (CFR) that address patient safety and their impact on product development.

Goal 3: Identify a specific regulatory issue for either a drug or device and be able to justify an appropriate position or strategy through presentation and written skills that permit students to acquire analytic and reasoning skills along with effective communication skills.

3.1 Strategically build various sections of a 510k submission for a Class II medical device given baseline data.

3.2 Demonstrate the ability to investigate case studies related to various regulatory topics (e.g. regulatory submissions, product defects, clinical trials and quality assurance strategies). This should include identification of the issue, research of the topic, and development of a report summarizing the findings.

3.3 Demonstrate the ability to construct a PowerPoint presentation on a topic related to a current regulatory issue. This presentation should have relevant content and appropriate information that addresses the selected topic adequately.

3.4 Demonstrate the ability to construct a PowerPoint presentation on a topic related to a current regulatory issue and communicate the findings effectively to an audience.

Goal 4: Demonstrate the ability to develop personal and professional skills in the field of regulatory affairs.

4.1 Identify current issues within the field of regulatory affairs and develop written responses or papers suitable for peer review.

4.2 Identify a regulatory professional in the industry and discuss with him/her the roles and responsibilities as a regulatory professional. Based on such discussions develop a hypothetical career pathway for yourself in outline format.

M.S. in Drug Regulatory Affairs - Requirements

[Program Code: 90328] {HEGIS: 1211}
Students taking the Non-Thesis Option must complete 33 credits of coursework and pass the written comprehensive examination. Students taking the Thesis Option must complete 33 credits of coursework of which 3 credits are in an Elective, 6 credits are in PHA 060 Research and Thesis, submit a satisfactory thesis proposal, submit a satisfactory written thesis, and successfully defend (orally) their written thesis.

The following courses are required for the Specialization in Drug Regulatory Affairs:

PHA	010	Biostatistics	3.00
PHA	603	Drug Regulatory Affairs	3.00
PHA	651	Pharmaceutical Labeling, Advertising and Promotion	3.00
PHA	653	Seminar in Social and Administrative Sciences	3.00
PHA	654	FDA Regulation of Over-the-Counter Drugs, Medical Devices and Dietary Supplements	3.00
PHA	657	Principles and Practices of Regulatory Compliance and Enforcement	3.00
PHA	660	Mechanics of Preparing INDs and NDAs	3.00
PHA	661	The American Pharmaceutical Industry	3.00

Thesis option students must take six (6) credits of PHA 060 and 3 credits of an Elective.

Master of Science in Pharmacy Administration

Program Description
Students will develop problem-recognition and problem-solving skills in order to facilitate positive change in various pharmacy practice settings. Graduates with the M.S. in Pharmacy Administration will have the knowledge and skills needed to advance to managerial and supervisory roles in health-system pharmacy, corporate-independent pharmacy practice, and other areas within the profession. Students may pursue careers or further education in:

- Hospital pharmacy administration
- Corporate (chain) pharmacy administration
- Pharmacy benefits management administration
- Academic pharmacy administration (Ph.D. level)
- Academia/teaching and research

Program Mission
The mission of the Master of Science in Pharmacy Administration degree program is to prepare students to become lifelong learners and leaders in a variety of settings including hospitals, long-term care facilities, chain and independent pharmacy practice management, consulting, business, non-profit research organizations and government/regulatory agencies. Students will demonstrate mastery of a broad didactic foundation in social and administrative pharmacy gained in advanced coursework, develop analytical and research skills through exposure to various projects and research opportunities in which their knowledge base is translated into practice, and employ skills such as statistical analysis and professional written and verbal communication. These abilities will be acquired through specific coursework, seminars and other professional and personal development opportunities offered during the course of study.

Program Goals and Objectives

1. Incorporate appropriate concepts and theories in solving social and administrative problems faced in a variety of pharmacy practice environments

2. Conceive, design and conduct evaluation projects to address contemporary social and administrative issues faced by health care institutions, corporate chains and independent pharmacies, and the pharmaceutical industry

3. Apply leadership skills in solving social and administrative issues faced in a variety of pharmacy practice sites and within the pharmaceutical industry

4. Identify essential resources for life-long learning

Pharmacy Administration Master of Science Requirements

[Program Code: 00200] {HEGIS: 1211}
Students taking the Non-Thesis Option must complete 33 credits of course work and pass the written comprehensive examination. Students taking the Thesis Option must complete 33 credits of course work including 3 credits of an Elective and 6 credits of PHA 060 (Research and Thesis), submit a satisfactory thesis proposal, submit a satisfactory written thesis, and successfully defend (orally) their written thesis.

Courses required for the M.S. Pharmacy Administration degree (24 credit hours):

PHA	010	Biostatistics	3.00
PHA	605	Human Resources Management	3.00
PHA	604	Pharmacoeconomics	3.00
PHA	671	Principles of Quality Management	3.00
PHA	607	Behavioral Pharmacy	3.00
PHA	633	Pharmaceutical Advertising and Promotion	3.00
PHA	653	Seminar in Social and Administrative Sciences	3.00
PHA	672	Capstone in Pharmacy Administration	3.00

Thesis option students must take six (6) credits of PHA 060 and 3 credits of an Elective.

GRADUATE COURSE DESCRIPTIONS

Course schedules are printed every semester. The listings below are tentative. They are based on past history and are subject to change.

Doctor of Philosophy Courses

PHS 602 Pharmaceutical Regulatory Overview
This course will provide a clear understanding of how new chemical entities (NME) emerge from drug discovery. When and how absorption, distribution, metabolism, and excretion (ADME) studies in discovery and exploratory development stages of drugs are conducted to assess the metabolism and excretion of a drug in animals and human. Outline the physicochemical characterization and compatibility of new molecule. First-in-human (FIH) studies in the drug development process and typically aim to characterize a compound's pharmacokinetics, potential effective concentration or dose, and safety or tolerability margins. A look at different phases of clinical trials for an understanding of the different purpose and questions these are trying to answer. Overview of submission requirements and the Food and Drug Administration's (FDA) review process. Intellectual property (IP) protection and market exclusivities to reward innovation, related legislation and ongoing issues will be discussed. Development and approval of generic versions of the new drugs and their impact on the industry will be reviewed.
Not open to students who have taken PHA 603.
Credits: 3
Annually

PHS 887 Pharmacokinetic / Pharmacodynamic Modeling and Simulation
There is a growing need for scientists trained in pharmacokinetic modeling and simulation. This is an elective course for students in the Ph.D. program in Pharmaceutics. The objectives of the course are: To provide an overview of the role of pharmacokinetic/pharmacodynamic (PK/PD) modeling and simulation in the drug development process, to give a graduate level introduction to the field of Pharmacometrics and to demonstrate the applications of Population PK/PD modeling and simulation using examples of biomarkers and clinical endpoints in various therapeutic areas such as CNS, cardiovascular, and infectious diseases. The course will balance theory and "hands on" training and will be a combination of didactic lectures, hands on exercises and larger M&S projects conducted by the students.
The pre-requisite of PHS 987 and 990 are required.
Credits: 3
On Occasion

PHS 983 Polymer Science
Polymers are widely used in the pharmaceutical, finding applications as tablet excipients, membranes, and carriers for drugs. The properties of polymers are of great importance in drug delivery in many forms, including solid, melt and in solutions. In this course, the physical chemistry and material properties of polymers are studied, with emphasis on pharmaceutical applications and current areas of intense research.
Credits: 3
Annually

PHS 987 Advanced Biopharmaceutics and Pharmacokinetics
Biopharmaceutics is the study of the relationship between the physical and chemical factors of a drug in a dosage form and the resultant impact on the rate and extent of drug absorption and, ultimately, the pharmacological response observed after its administration. Pharmacokinetics concerns the mathematical representation of drug absorption, distribution, metabolism and excretion. In this course, the principles and theories of biopharmaceutics and pharmacokinetics will be discussed, with emphasis on the various analytical tools to characterize drug disposition in vivo. The relationship between pharmacokinetics and pharmacodynamics will also be presented. The material mastered in this course will be used to develop and test mathematical models of drug disposition in PHS 990 (Mathematical Modeling).
Credits: 3
On Occasion

PHS 989 Special Topics in Pharmaceutics
Special topics in pharmaceutics that are of current interest.
Credits: 3
On Occasion

PHS 990 Mathematical Modeling
This course involves application of the pharmacokinetic principles presented in PHS 986 (Advanced Biopharmaceutics and Pharmacokinetics) to develop mathematical models which describe drug absorption, distribution, metabolism and excretion, with emphasis upon computer "fitting" of pharmacokinetic and pharmacokinetic-pharmacodynamic models to characterize the disposition of a compound in biological systems.
The pre-requisite of PHS 987 is required.
Credits: 3
On Occasion

PHS 997 Solid State Characterization
Substantial development has taken place in the last decade in terms of emerging technology in the field of analytical chemistry. As a graduate student it is important to keep abreast of these technologies and understand the underlying principles behind the techniques and technologies. This course will help students develop the ability to solve theoretical problems and help them identify relevant techniques to obtain meaningful data. Together with case studies and examples, this course will help graduate students to think independently to solve problems related to solid-state characterization.
Credits: 3
Annually

PHS 998 Ph.D. Research & Thesis
Each Ph.D. candidate will conduct Ph.D. thesis research under the guidance of a committee whose chair will be the candidate's major professor. The enrollment and fee for this course registration will be repeated for a minimum of four semesters, and until the dissertation is completed.
Credits: 3
Every Semester

Master of Science Courses

Pharmaceutics, Industrial Pharmacy, and Cosmetic Science

PHS 060 Research and Thesis
Individual research in the various areas of specialization in cosmetic science. Students doing the thesis option must register at least twice for this course. Pass-Fail only.
Credits: 3
Every Semester

PHS 070 Special Problems
Laboratory, fieldwork or library research in the various areas of specialization. Pass-Fail only. Permission of the instructor required.
Credits: 3
Every Semester

PHS 750 Pharmaceutical Good Manufacturing Practices
This course provides critical knowledge of legislation relating to the registration, manufacture, storage and supply of pharmaceutical products, GxP and quality system compliance, and concepts of quality and risk management, quality assurance and quality control with this heavily regulated industry.
Credits: 3
Annually

PHS 760 Dermal and Transdermal Drug Products: Development and Regulations
This course will cover the basic concepts of dermal and transdermal drug delivery such as formulation types and properties, as well as a mechanistic understanding of drug release from the formulation, partitioning, and disposition kinetics of the API in the skin.
Credits: 3
On Demand

PHS 761 QbD and Process Validation
This course will provide the student with an understanding of the scientific principles and regulatory requirements for pharmaceutical companies that are legally mandated to validate their manufacturing processes. It will examine

development of quality products and processes and examine the elements of process validation that are essential for the production of sale and effective drugs.
Credits: 3
On Demand

PHS 931 Advanced Physical Pharmacy I
A systematic study of the application of physico-chemical principles to the pharmaceutical and cosmetic sciences. Topics include complexation, colloids, interfacial phenomena, dissolution theory, suspensions, micrometrics and rheology.
Credits: 3
Every Semester

PHS 932 Advanced Physical Pharmacy II
A systematic study of the application of physico-chemical principles to the pharmaceutical and cosmetic sciences. Topics include complexation, colloids, interfacial phenomena, dissolution theory, suspensions, micrometrics and rheology.
Credits: 3
Every Semester

PHS 934 Principles of Industrial Pharmacy I
A study of methods used to formulate, manufacture and stability-test various dosage forms including tablets, ointments, creams, capsules, suspensions, sterile products, etc. The different techniques used to formulate dosage forms possessing unique properties such as sustained or delayed release will also be covered.
Credits: 3
Every Fall

PHS 935 Principles of Industrial Pharmacy II
A laboratory course designed to give students experience in utilizing industrial instrumentation to test basic principles and theories in the design and production of various dosage forms.
Credits: 3
Every Spring

PHS 936 Dosage Form Design
Biopharmaceutic and pharmacokinetic principles, coupled with physical pharmacy concepts, are used to discuss methods necessary for optimizing the design of various drug-delivery systems. The course is intended for those having a basic understanding of dosage forms and their design, and is geared to the underlying principles of drug release from dosage forms. While a major portion of the course is devoted to oral solids, liquids, topicals and parenteral design are also covered, together with means of evaluation and testing.
Credits: 3
On Occasion

PHS 950 Cosmetic/Dermatological Formulations and Technology I
(The first course in a two-semester sequence.) Designed for in-depth studies of skin, mechanistic analysis of the relevant skin functions, percutaneous absorption, rationale for dermatologic formulations, physicochemical principles used, performance criteria and evaluation of the topical systems. Emphasis is placed on the product development, scale-ups, manufacturing, stability-testing and performance evaluations of modern-day cosmetic, toiletry and pharmaceutical topical products. The courses cover all types of skin care, hair care and treatment systems including creams, lotions, shampoos, gels, fluids, makeups, sunscreens and pharmaceutical dermatologicals.
Credits: 3
Every Fall

PHS 951 Cosmetic/Dermatological Formulations and Technology II
(The second course of a two-semester sequence.) Designed for in-depth studies of skin, mechanistic analysis of the relevant skin functions, percutaneous absorption, rationale for dermatologic formulations, physicochemical principles used, performance criteria and evaluation of the topical systems. Emphasis is placed on the product development, scale-ups, manufacturing, stability-testing and performance evaluations of modern-day cosmetic, toiletry and pharmaceutical topical products. The courses cover all types of skin care, hair care and treatment systems including creams, lotions, shampoos, gels, fluids, makeups, sunscreens and pharmaceutical dermatologicals.
The pre-requisite of PHS 950 is required.
Credits: 3
Every Spring

PHS 952 Cosmetic/Dermatological Formulations and Technology Laboratory
Designed for in-depth study of product development, scale-up, manufacturing, stability-testing and performance evaluations of modern-day cosmetic and toiletry products.
Credits: 3
On Occasion

PHS 958 Aerosol Science and Technology
An in-depth study of the physicochemical principles of aerosol science and technology. The topics covered include: aerosol propellants, containers, valve and actuator systems, product development, manufacturing, stability testing and performance evaluations of all types of aerosol products. Special emphasis is placed on the homogeneous and heterogeneous systems used in the formulations of topical, nasal and inhalation aerosol drug delivery products.
Credits: 3
On Occasion

PHS 960 Properties/Applications of Cosmetic and Pharmaceutical Raw Materials
Designed to be of special value to individuals involved in formulation and manufacturing work of cosmetic, toiletry and pharmaceutical products. Covers the physicochemical properties of major classes of raw materials. These include tablets, ointments and creams, surfactants, film formers, plasticizers, preservatives, antioxidants, sunscreens, thickeners and dispersants, pharmaceutical solvents, etc. Special emphasis is placed on the creative and innovative application of these raw materials in the development of contemporary cosmetic/toiletry and pharmaceutical dosage forms.
Credits: 3
Every Fall

PHS 972 Methods of Pharmaceutical Analysis
Theory of chromatographic, spectrophotometric and other methods of analysis as applied to clinical, pharmaceutical and cosmetic problems is discussed.
Credits: 3
Every Spring

Pharmacology, Toxicology and Medicinal Chemistry

PTM 020 Seminar In Pharmacology/Toxicology
Students, faculty and guests review and discuss original works and recent advances in pharmacology and toxicology. The seminar will include invited lectures on cutting edge research. Mandatory for every student graduating in Pharmacology/Toxicology. May be repeated for credit.
Credits: 3
Every Semester

PTM 060 Research and Thesis
Individual research in the various areas of specialization. Students doing the thesis option must register at least twice for this course. Pass-Fail only.
Credits: 3
Every Semester

PTM 070 Special Problems
Laboratory, fieldwork or library research in the various areas of specialization. Pass-Fail only. Permission of the instructor required.
Credits: 3
Every Semester

PTM 704 Autonomic Pharmacology
A course designed to acquaint the students with the historical development of the concept of neurohumoral transmission, adrenergic and cholinergic receptors, storage and release of neurohormones, blocking agents, and biochemical aspects of adrenergic and cholinergic action. Students will be required to read and discuss selected references.
Credits: 3
Every Fall

PTM 705 Biochemical Pharmacology
This course considers the mechanisms of drug action from the molecular-biochemical viewpoint. Initial discussion of the fundamentals of drug action is followed by extensive coverage of major drug groups such as anticancer, antimicrobials, analgesics and autonomic drugs. Molecular parameters of receptors are emphasized throughout

as in enzymology, where applicable. Outside readings will be assigned.
Credits: 3
Every Fall and Spring

PTM 709 Advanced Pharmacology
This is an advanced course in the basic principles of pharmacology. Discussion will include receptor theory, enzyme activity and inhibition, structure activity relationship, pharmacokinetics, adverse reactions and drug-drug interactions.
Credits: 3
Every Fall

PTM 802 Experimental Methods in Pharmacology and Toxicology
Modern techniques used in the qualitative and quantitative evaluation of drugs and drug toxicity in animal systems. These include whole animal studies, isolated tissue techniques and analytical instrumentation.
Credits: 3
On Occasion

PTM 905 Principles of Immunotherapy
This course is concerned with the study of antigens and the immune system, the humoral response and the cellular response to antigen. Non-atopic immunological drug reactions and disease states characterized by abnormal immunological responses will be discussed. Research papers dealing with selected immunological topics will be assigned and discussed.
Credits: 3
On Occasion

PTM 910 Toxicology of Drugs and Chemicals
General principles of toxicology; current trends and recent developments in the prevention, detection, diagnosis and treatment of acute and chronic toxicities from drugs and chemicals; toxic drug interactions.
Credits: 3
Every Fall

PTM 920 Molecular Pharmacology
An advanced course in pharmacology dealing with the molecular mechanisms of drug action. The discussions will include receptor-drug interactions, importance of chirality, receptor-ligand interactions, interactions of drugs with endogenous polymers, modulators of chemical transmitters and such other topics involving molecular biology.
Credits: 3
On Occasion

PTM 923 Advanced Medicinal Chemistry
This lecture course conveys basic principles of contemporary drug design. An overview will first be provided of drug chemical characteristics, pharmacokinetics, pharmacodynamics, toxicology, pharmacogenetics and bioinformatics. Structure/function relationships of drug targets (receptor proteins, enzymes, nucleic acids) will be discussed in the context of drug design toward optimizing interactions with the biological target. De novo drug design and optimization of lead compounds obtained from high throughput screening will be taught with respect to stereochemistry, quantitative structure-activity relationship (QSAR), computational molecular modeling of drug candidates as well as the drug-target interaction, and rational design of drug analogs. Design strategies will include combinatorial/parallel synthesis, prodrugs, and taking into account potential drug delivery issues. Student presentations of primary literature on recent advances in medicinal chemistry will be occasionally required.
Credits: 3
Annually

PTM 924 Clinical Pharmacology and Toxicology
This lecture course covers the fundamentals of clinical use of therapeutic drugs as well as basic principles in managing the poisoned patient. A brief pharmacological review is provided on drug metabolism and transport, assessment of drug therapeutic effects, pharmacogenetics, and individualization of drug therapy, followed by discussions on molecular mechanisms of toxicity, toxin-induced biological changes and organ systems affected, clinical manifestations of toxicity, related laboratory tests, and treatment approaches to drug- and chemical-induced toxicity. The course will include the pharmacotherapy of common diseases and disorders such as hypertension, congestive heart failure, asthma, renal disorders, psychiatric disorders, peptic ulcer disease and infectious diseases. Use of chemotherapeutics, antibiotics, and other medication regimens commonly associated with toxicity will also be discussed. Student presentations of primary literature on recent advances in medicinal chemistry will be occasionally required.
Credits: 3
Annually

PTM 925 Pharmacogenomics
Pharmacogenomics, the union of pharmacology and genomics, is emerging as a novel medical research field. This course reviews the history and current status of the influence of hereditary factors on drug action and metabolism, as well as predisposition to diseases. It is intended to introduce graduate students to pharmacogenomics and personalized medicine through a series of lectures, case studies and students" presentations of cutting-edge technologies used in this field.
Credits: 3
On Occasion

Pharmacy Administration and Drug Regulatory Affairs

(The program in Pharmacy Administraton is currently on hiatus. The program in Drug Regulatory Affairs is currently active.)

PHA 010 Biostatistics
An introductory course in statistics with emphasis on applications in the health sciences. Topics include description of data, measures of central tendency and dispersion, inferences from data, significant differences, and measures of similarity and differences among groups of data.
Credits: 3
On Demand

PHA 060 Research And Thesis
Individual research in the various areas of specialization, Pass-Fail only.
The pre-requisites of PHA 050 and 653 are required.
Credits: 3
Every Semester

PHA 070 Special Problems
Laboratory, fieldwork or library research in the various areas of specialization. Pass-Fail only. Permission of the instructor required.
Credits: 3
On Occasion

PHA 603 Drug Regulatory Affairs
(This course is a prerequisite for all Drug Regulatory Affairs courses, except PHA 661) A comprehensive introductory course that provides an overview, understanding of, and appreciation for the numerous statutes and regulations governing drugs, medical devices and cosmetics.
Not open to students who have taken PHS 602.
Credits: 3
Every Fall

PHA 604 Pharmacoeconomics
This course presents socioeconomic aspects of health care that influence need, demand and provision of health care through the private and public sectors. The course will also develop basic concepts of economic theory as an analytical tool to understand them from provider as well as consumer points of view in an evolving healthcare delivery system.
Credits: 3
On Occasion

PHA 635 Pharmacy Financial Management
This course is designed to provide students with an overview of financial management within a healthcare environment. Course content includes: accounting fundamentals, financial statements, financial ratios, budgeting and cost controls, and reimbursement models. Course content is delivered using journal articles and cases.
Credits: 3
On Occasion

PHA 636 Pharmacy Supply Chain Management
This course is designed to provide students with an overview of the pharmacy supply chain management within a healthcare environment. Course content includes: contents of supply chain management, supply chain processes, supply chain

performance measurement, developing and implementing partnerships in the supply chain, implementing supply chain management, and supply chain cost control. Course content is delivered using journal articles and cases.
Credits: 3
On Occasion

PHA 645 Internship in Drug Regulatory Affairs
This course is designed for those graduate students who have an interest in employment opportunities in the pharmaceutical industry or government. The student works in an on-the-job setting on carefully planned work activities designed to provide a basic understanding of the drug regulatory environment, process and outcome. A report of these work activities is required at the completion of the course. Pass-Fail only.
Credits: 3
On Occasion

PHA 651 Pharmaceutical Labeling, Advertising and Promotion
A comprehensive course which reviews prescription and OTC drug labeling, advertising and promotion regulations. Examines the development and clearance of labeling and advertising pieces (container labels, package inserts, journal ads, direct mail, visual aids, reminder advertising, etc.). Discussion of principles of Fair Balance, Brief Summary and Full Disclosure. Students will be required to prepare advertising and promotional pieces. The role of the regulatory affairs department, product manager, advertising agency, etc., will be discussed. Review of institutional advertising, preapproval advertising, prescription drug advertising to the consumer (PDAC), comparative advertising.
The co-requisite of PHA 603 is required.
Credits: 3
On Occasion

PHA 653 Seminar in Social and Administrative Sciences
Students generate solutions to current problems in pharmaceutical care, the pharmaceutical industry and public policy, and support their views with evidence that reflects concepts, principles, theories and philosophies from the social/behavioral/administrative sciences. Based upon their research, students will prepare written reports, give multimedia class presentations and conduct class discussions.
Credits: 3
Every Fall and Spring

PHA 654 FDA Regulation of Over-the-Counter Drugs, Medical Devices and Dietary Supplements
Provides the participants with an understanding of, and an appreciation for, the regulation of over-the-counter drugs, medical devices, cosmetics and animal health drugs as legislated by the Federal Food, Drug, and Cosmetics Act and its amendments and the Fair Packaging and Labeling Act.
The pre-requisite of PHA 603 is required.
Credits: 3
Every Spring

PHA 655 Chemistry, Manufacturing and Controls (CMC) Regulatory Affairs
This course describes various aspects of CMC regulatory affairs as they relate to the development, approval and marketing processes for drugs in the U.S. Topics include: FDA vs. pharmaceutical industry viewpoints on CMC regulatory affairs; quality issues related to CMC regulatory affairs; organization of the CMC regulatory function and role of the CMC regulatory professional; CMC regulations and guidance; format, required, required content and scientific considerations for the CMC sections of INDs and NDAs for traditional dosage forms; and an overview of CMC requirements and considerations for other submissions (i.e. generics, biologics, animal drugs, drug master files, devices and international dossiers). Offered on occasion.
The pre-requisite of PHA 603 is required.
Credits: 3
On Occasion

PHA 657 Principles and Practices of Regulatory Compliance and Enforcement
This course emphasizes the history, development, implementation, monitoring, operational procedures and audit techniques of investigation and enforcement. Enforcement issues and problems are addressed.
The pre-requisite of PHA 603 is required.
Credits: 3
Every Spring

PHA 658 International Drug Regulatory Affairs
The increasing globalization of product development and marketing means that companies that manufacture and market products in many different countries must comply with an ever-increasing spectrum of laws and regulations. The borders that divide nations seem to be shrinking as the means of rapid communication increase. But the lack of regulatory consistency across the globe makes it extremely difficult for pharmaceutical manufacturer's to implement a globally acceptable product design. The purpose of this course is to provide an overview of global regulatory requirements for U.S. and EU for product registration. Topics covered will include the understanding of the ICH (International Conference on Harmonization) and CTD (Common Technical Document) as well as some basic understanding of international product registration requirements. Following this course, students should be able to understand the fundamentals of global regulatory issues.
Credits: 3
On Occasion

PHA 660 Mechanics of Preparing INDs and NDAs
This course provides an in-depth assessment and analysis of the requirements of the investigational new drug (IND) and new drug applications (NDA). Component parts, appropriate format, assembly and submission of each is emphasized.
The co-requisite of PHA 603 is required.
Credits: 3
Every Fall

PHA 661 The American Pharmaceutical Industry
This course provides a comprehensive view of the key activities in which major pharmaceutical companies are involved, e.g., research and development, pilot manufacturing, manufacturing and packaging, quality assurance, marketing, sales, distribution, regulatory affairs and pharmacy relations.
Credits: 3
On Occasion

APPROVED PROGRAMS

New York State Education Department Inventory of Registered Programs

Enrollment in other than registered or otherwise approved programs may jeopardize a student’s eligibility for certain student aid awards.

LIU Pharmacy

Major	Hegis Code	Degree
Drug Regulatory Affairs	1211	MS
Pharmaceutical Sciences	1211	Ph.D.
Pharmaceutical Studies	1211	BPS
Pharmaceutics	1211	MS.
Pharmacology / Toxicology	0409	MS
Pharmacy	1211	PharmD

LIU TRUSTEES AND LEADERSHIP TEAM

Board of Trustees

CHAIRMAN
Eric Krasnoff

SENIOR VICE CHAIR
Michael P. Gutnick '68

MEMBERS
Rao Subba Anumolu H'18
Thomas M. Buonaiuto '87
Daniel B. Fisher ’67
Greg Galdi '76
Michelle Gethers-Clark '83
Justin Grant '06
Steven S. Hornstein ’80
Bob Jahelka '84
Alfred R. Kahn ’84, H’05
Frank Lalezarian
Brian K. Land ’86
Sarabeth Levine ’64, H’14
Howard M. Lorber ’70, ’91, H’01
Winnie Mack '76, '85
Michael Melnicke
Michele Mercier (Bahnik)
Richard P. Nespola ’67, ’73
William R. Nuti ’86
Chintu Patel H'18
Cherie D. Serota
Sharon Sternheim
Ronald J. Sylvestri ’66

TRUSTEES EMERITI
John R. Bransfield, Jr.
Eugene H. Lutney H'98'
Theresa Mall Mullarkey
Thomas L. Pulling

EX OFFICIO
Kimberly R. Cline

H - indicates honorary doctorate from LIU

Leadership Team

Kimberly R. Cline
President
George Baroudi
Vice President for Information Technology
Michael Berthel
Chief of Staff and Vice President for Student Affairs
Mohammed Cherkaoui
Sr. Vice President for Research

Joseph L. Schaefer
Chief Operating Officer

Christopher Fevola
Vice President and Chief Financial Officer
Roy Fergus
Vice President for Facilities
Kerry Kruckel
Vice President for University Advancement

Maureen Tuthill
Vice President for Academic Affairs

LIU PHARMACY FACULTY

Full-Time Faculty

Ahmed Abu Fayyad
Associate Professor of Phramaceutical Sciences
B.S., Isra University
M.S., University of Petra
Ph.D., University of Louisiana Monroe

Kenza E. Benzeroual
Associate Professor of Pharmacology
B.S., Paul Sabatier University (France)
M.S., Toulouse Polytechnic Institute (France)
M.S., LIU Pharmacy
Ph.D., Montreal University (Canada)

Mina Chau
Assistant Professor of Pharmacy Practice
PharmD, The University of Texas at Austin College of Pharmacy

Hubert Chua
Assistant Professor of Pharmacy Practice
PharmD, University at Buffalo, The State University of New York

Rebecca Cope
Associate Professor of Pharmacy Practice
Pharm.D., Albany College of Pharmacy and Health Sciences

Jaclyn Cusumano
Assistant Professor of Pharmacy Practice
Pharm.D. University of Rhode Island

Rutesh Dave
Director, Natoli Institute for Industrial Pharmacy Research & Development
Professor of Pharmaceutics
B.S., K.L.E's College of Pharmacy (India)
Ph.D., LIU Pharmacy

Lauren Eng
Assistant Professor of Pharmacy Practive
Pharm.D., University of Rhode Island

Brooke D. Fidler
Associate Professor of Pharmacy Practice
Pharm.D., University of Rhode Island

Briann Fischetti
Director of Postgraduate Programs
Associate Professor of Pharmacy Practice
Pharm.D., South Carolina College of Pharmacy, University of South Carolina
MBA, Long Island University

Islam Ghazi
Associate Professor of Practice Pharmacy
B.S. M.S. Alexandria University (Egypt)
M.S., Medical Research Institute
Pharm.D., University of Florida

Suzanna Gim
Director of International Affairs
Professor of Pharmacy Practice
B.A., M.P.H., New York University
Pharm.D., University of Maryland

Fernando Gonzalez
Assistant Professor of Pharmaceutical Sciences
B.S., M.S., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Sara Grossman
Associate Professor of Pharmacy Practice
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Lana B. Hareez
Assistant Professor of Pharmacy Practice
Pharm.D., University of North Carolina at Chapel Hill

Tracey Hodurski
Assistant Professor of Pharmaceutical Sciences
B.S., St. John's University College of Pharmacy and Allied Health Sciences

Xinyi Huang
Assistant Professor of Pharmacy Practice
Pharm.D. University of Maryland School of Pharmacy

Julia Junker
Assistant Professor of Pharmacy Practice
Pharm.D., Butler University College of Pharmacy

Ramaswamy Kannappan
Assistant Professor Pharmaceutical Sciences
B.A. Pharmacy., M.S., The Tamil Nady Dr, M.G.R. Medical University
Ph.D., Pharmaceutical Sciences, Niigata University

Deborah Kayode
Assistant Professor of Pharmaceutical and Industrial Science/ Director of Cosmetic Science
B.S., Ajayi Crowther University
M.S., University of Sunderland
Ph.D., University of Sunderland

Ra'ed Khashan
Associate Professor of Pharmaceutical Sciences
B.S., Yarmouk University
M.S., University of Texas at Austin
Ph.D. University of North Carolina at Chapel Hill

Avinash Kumar
Assistant Professor of Pharmaceutics
B.Sc. (Hons) in Zoology, University of Delhi, India
M.Sc. in Molecular and Human Genetics, Banaras Hindu University, INDIA
Ph.D. in Biotechnology, University of Pune, India

Maria Longo
Associate Professor of Pharmacy Practice
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Nino Marzella
Associate Professor of Pharmacy Practice
B.S., M.S., Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Michael Mohsen
Assistant Professor of Pharmaceutical Sciences
B.S. in Chemistry, New York University
Ph.D. in Chemistry, Stanford Universtiy

Jadwiga S. Najib
Professor of Pharmacy Practice
B.S., St. John's University;
Pharm.D., University of Minnesota, Twin Cities

Joseph P. Nathan
Chair, Division of Pharmacy Practice
Professor of Pharmacy Practice
B.S., M.S., Arnold & Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy
Pharm.D., University of Arkansas for Medical Sciences

Timothy V. Nguyen
Professor of Pharmacy Practice
B.S. in Pharm., Rutgers, The State University of New Jersey
Pharm.D., University of the Sciences in Philadelphia
M.B.A., Long Island University

Olga Popova
Assistant Professor of Pharmacy Practice
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Elaena Quattrocchi
Associate Professor of Pharmacy Practice
B.S., Pharm.D., St. John's University

Janna Roitman
Director of Interprofessional Education
Associate Professor of Pharmacy Practice
M.S., Odessa State Academy of Refrigeration (Ukraine)
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy
M.P.A. LIU Brooklyn

Lavinia Salama
Assistant Professor of Pharmacy Practice
Pharm.D., Albany College of Pharmacy and Health Sciences

Nardine Salgado
Assistant Professor of Pharmacy Practice
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

David R. Taft
Chair, Pharmaceutical Sciences
Director of the Samuel J. & Joan B. Williamson Institute of Pharmacometrics
Professor of Pharmaceutics
B.S., Wagner College
Ph.D., University of Connecticut

Yuliana Toderika
Associate Professor of Pharmacy Practice
B.S. Wagner College
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

Tina Zerilli
Associate Professor of Pharmacy Practice
Pharm.D., Arnold and Marie Schwartz College of Pharmacy and Health Sciences, LIU Pharmacy

EMERITI FACULTY

Robert A. Bellantone
B.S., Ph.D.
Professor of Pharmaceutics

Stephen M. Gross
B.S., M.A., Ed.D.
Dean Emeritus;
Professor of Social and Administrative Sciences

Theodore Jochsberger
B.S., A.B., M.A., Ph.D.
Professor of Pharmaceutics

Harold Kirschenbaum
B.S., M.S., Pharm.D.
Professor of Pharmacy Practice

Janet Landau
MR Pharm.S., B.S., M.S., Pharm.D.
Associate Professor of Pharmacy Practice

Nouri Y. Mary
Ph.C., M.S., Ph.D.
Professor of Pharmacognosy

Jack M. Rosenberg
B.S., Pharm.D., M.S., Ph.D.
Associate Professor of Pharmacy Practice

Joy S. Rosenberg
B.A., B.S., Pharm.D.
Associate Professor of Pharmacy Practice

PHARMACY BOARD OF ADVISORS

Sharon Sternheim
Chair
LIU Trustee
President, Zitomer/Thriftway Drug Corp

Michael Melnicke, PharmBS
LIU Trustee
Administrator, Rockaway Care Center Nursing Home

Herbert J. Conrad, PharmBS, MS ’54 M’60 H’91
Consultant, Biotechnology

Thomas Sutherland, PharmBS
Owner, Neergaard Pharmacy

Travis Leonardi, PharmD.
CEO, SOS Technologies Holdings
Salah U. Ahmed, Ph.D.
President and CEO, Abon Pharmaceuticals, LLC

Michael Fedida, PharmBS, MS ’72 M’75
Pharmacist and Owner, J + J Pharmacy

Asraf Latif, PharmBS ’91
CEO, Sheefa Pharmacy and Wellness Center

Judith E. Tytel, J.D.
General Counsel and Chief Compliance Officer
Fiorello Pharmaceuticals
Allegaert, Berger & Vogel, LLP

Spiro Spireas, Ph.D.
Chairman and CEO, Sigmapharm Laboratories, LLC

Elan Katz, RPh ‘96
President and CEO, Quickrx Specialty Pharmacy

David Light, MS
Founder and CEO, Valisure

Susan Mashni, BS, Pharm.D.
Senior VP and Chief Pharmacy Officer
Mt. Sinai Health System

Craig Ruffin, Pharm.D. MBA ‘85
Pharmacy Radiation Safety Officer and Senior Nuclear Pharmacist
Cardinal Health

Frank Sosnowski, PharmBS
Senior Director of Pharmacy, Montefiore Medical Center

Danny Dang, Pharm.D.
President, Esco Drug Co Inc.