

**Notre Dame of Maryland University
Proposal for a New Certificate Program
(Existing Courses)**

Certificate in Leadership & Entrepreneurship

Rationale

The pharmacist is a vital member of the healthcare team as the U.S. population ages and the use of medications continues to play an important role in the prevention and treatment of acute and chronic diseases. As a result, there is a need for the pharmacist to vet the safe and effective use of medications. The Joint Commission of Pharmacy Practitioners' vision for pharmacy practice is that "pharmacists will be the health care professionals responsible for providing patient care to ensure optimal medication therapy outcomes" (<http://www.acsp.com/docs/positions/misc/JCPPvisionstatement.pdf>). To achieve this vision, Notre Dame of Maryland University School of Pharmacy designed a curriculum that educates student pharmacists to be compassionate, ethical professionals who improve medication use and provide quality patient care to a diverse population. Therefore, we develop leaders and advance public health.

With the complexities of healthcare, the pharmacist must not only have knowledge and skills for clinical care but also the ability to identify and implement creative solutions to respond to an ever changing healthcare landscape. As an accreditation requirement, the Accreditation Council on Pharmacy Education requires all schools of pharmacy programs to "impart to the graduate the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate self-awareness, leadership, innovation and entrepreneurship, and professionalism {so that} the graduate is able to demonstrate responsibility for creating and achieving shared goals, regardless of position. Also, the graduate is able to engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goal" (<https://www.acpe-accredit.org/pdf/Standards2016FIN-AL.pdf>).

To meet this requirement, the School already has three leadership courses that address this standard. However, for students who have a particular interest in entrepreneurship, we propose to offer two additional courses in entrepreneurship that build upon the three existing required courses. The proposed certificate requirements also take a new approach to the concept of entrepreneurship that goes beyond what traditionally has been equated with owning one's own independent pharmacy. Although these courses will provide students with the knowledge to pursue that goal, this new concept goes beyond this, and considers that individuals, throughout their careers, will be engaged in launching new enterprises, and initiatives within health systems and other organizations. This new approach developed by Steven Blank, a professor at Stanford University, is the basis by which the National Science Foundation formed its Innovation Corp (I-Corps), public-private partnership to help develop scientific and engineering discoveries into useful technologies (Blank S. *Harvard Business Review* May 2013; https://www.nsf.gov/news/news_summ.jsp?cntn_id=127011).

The total of 14 credits is already included in the number of credits required for completion of the Doctor of Pharmacy Program. The two new courses can be used to satisfy elective requirements in the program. Students will be able to complete requirements for this certificate by the end of the third year. Students will complete an enrollment form and submit it to the Office of the Dean.

Students who complete this five-course sequence will receive a certificate in Leadership & Entrepreneurship upon successful completion of the pharmacy program. There is no additional cost for students who wish to complete this certificate program.

Five Course Sequence

PHRD 312 Pharmacy Practice Management (3 credits) This course provides students with an understanding of financial and operations management as it relates to pharmacy practices in community, hospital and other practice settings. Topics such as inventory control, pricing, marketing, business plan development for new services, and management of innovative changes in pharmacy practice will be included. This course is currently a required course in the curriculum.

PHRD 505 Human Resource Management (3 credits) This course will focus on personnel management as it relates to pharmacy practice. Topics such as performance management, effective hiring and recruitment strategies, retaining, motivating, developing and rewarding of employees will be discussed. Information in this course will provide the necessary foundation for students to develop the supervisory skills needed for practice. This course is currently a required course in the curriculum.

PHRD 308 Developing the Leader Within (2 credits) As a health care professional, the pharmacist must be able to take a leadership role within his/her own practice, profession and community at large. This course will provide students with the opportunity for self-exploration, exploration of leadership models, and discussion of the relevance of political advocacy to pharmacy practice. This course will incorporate the communication, teamwork and self and group assessment skills that are introduced in Foundations for Pharmacy Practice. Interprofessional experiences are also incorporated into the course. This course is currently a required course in the curriculum.

PHRD 626 Fundamentals of Financial Management (3 credits) The purpose of this course is to provide a foundation of financial management concepts. The focus will be on fundamental concepts of accounting and finance, and financial tools that can be used in investment and financial decision making. The concept of venture capital and approaches to obtaining financial support for new initiatives, with a particular emphasis in health care, will be covered.

PHRD 627 Entrepreneurship (3 credits) As a member of the healthcare team, pharmacists need to be able to identify and implement solutions and new initiatives to address healthcare needs. This course will introduce students to the characteristics of entrepreneurs, process of evaluating potential business opportunities, techniques for recognizing business and investment opportunities, and the Lean Start-UP model for entrepreneurship.

Faculty

Larry Beyer, MBA – Larry Beyer, Assistant Professor, Business & Economics

Nicole Cullhane, Pharm.D, FCCP, BCPS – Director of Experiential Education & Professor, Clinical & Administrative Sciences

Anne Lin, Pharm.D., FNAP – Dean & Professor, Clinical & Administrative Sciences

Paul Vitale, Pharm.D. – Associate Professor & Chair, Clinical & Administrative Sciences