

**Texas Tech University Health Sciences Center**  
*School of Pharmacy*

**Texas Tech University**  
*Rawls College of Business*

***Pharm.D / MBA Program***



## **Program Director's Message**

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*The Pharm.D/MBA program provides opportunities to selected students to develop their leadership skills as we rapidly change our health care delivery system. The Health Organization Management concentration encourages greater exploration of subject matter that is important to the future of pharmacy and health care. Our students will acquire important skills that will be used to shape the future of health care delivery. This program is unique in that students get to be part of a joint effort that emphasizes the co-dependency of patient care delivery and the business models that support that care. As a Pharm.D/MBA student, you have been selected to be the future of pharmacy practice leadership. We are proud to be able to offer this unique program and we know that you will be proud to be one of our future graduates.*

*Dr. Roland A. Patry  
Program Director*

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## **PROGRAM INTRODUCTION AND HISTORY:**

### **PHARM.D / MBA PROGRAM**

The idea of a Pharm.D/MBA program was born in early 2006 in discussions between several faculty at the Texas Tech University Rawls College of Business and the Texas Tech University Health Sciences Center (TTUHSC) School of Pharmacy. The central theme to the discussions was the need to develop and train the future leaders of the profession. The Health Organization Management (HOM) concentration within the MBA program matched what the pharmacy faculty believed were the necessary areas of focus to develop strong leaders in health care organizations.

The curriculum emerged after several rounds of negotiation between the programs, keeping in mind the accreditation requirements of business and pharmacy. The curricular design model was determined after reviewing other Pharm.D/MBA programs and matched with the teaching schedules and course prerequisites. Rather than adopting the various models currently in use throughout the U.S., the faculty chose to use a dual-degree approach and integrate both programs into a typical 4-year course of study. Students actually receive their MBA at the end of the P-3 year, which gives them an added advantage when interviewing for jobs in the P-4 year. Since the program was structured to be dual-degree, it was essential that all of the approved content for both degree plans be met.

The initial plan was to create several tracks for Pharm.D students to obtain the MBA. The first track would be to offer the opportunity of taking the MBA coursework to rising P-2 and rising P-3 students, with the goal to phase out the P-3 program and only retain the rising P2 program. This track required the development of separate curricula to ensure that all requirements for both the Pharm.D and MBA were met. The first students began class in the summer 2009. This track ended with the graduation of the first class.

The second track was viewed as the most desired by the faculty at both colleges. This involved offering the program to P0 students (accepted into pharmacy school but not currently enrolled in pharmacy courses) as well as rising P2 students. The P0 students would begin MBA coursework in the summer, prior to enrollment in the pharmacy school. The rising P2 students would begin their MBA program in the summer between the P1 and P2 years. The summer 2010 class was the first under this track.

The third track was viewed as a future development and would involve the creation of a post-Pharm.D graduate program that might, if the student chose, involve a concurrent 2-year management residency program. A start date for this track has not been identified.

At the time, the Pharm.D/MBA program at Texas Tech was the 31st program of its kind in the country and the only program between Georgia and Arizona. The HOM program at the College of Business is one of the few accredited programs for health organization management in the country and is currently the only one of its kind in Texas.

In this dual-degree program, the student will earn both the Pharm.D and MBA degrees during the four years of pharmacy school. This degree track produces outstanding pharmacists with greater insight into the intricacies of healthcare management systems. Students admitted to the Pharm.D/MBA program can begin the course of study in the summer before the first year of pharmacy school. Business courses are offered in Lubbock during the summer and via telecast or online during the academic year. Areas

of study include accounting, management strategy, business decision-making skills and methods, business information systems, and other core skills in the business curriculum. For more specific knowledge of the organizational context in which healthcare is provided, students will complete courses concentrating in health organization management.

## **APPLICATION INFORMATION**

**\*Applicants for the Pharm.D/MBA Dual Degree Program MUST have a prior baccalaureate or higher degree to be admitted into the program**

The TTUHSC School of Pharmacy will require completion of a Pharm.D/MBA application form by December 1 of each year. A Pharm.D/MBA selection committee will review the academic achievement of each candidate and forward a recommendation to the Rawls College of Business and HOM program. Students should delay completing the Rawls College of Business applications until a determination of School of Pharmacy (SOP) recommendation has been made. If the Committee does not recommend a student apply to the MBA program, the SOP program coordinator will counsel the student. The Rawls College of Business and the School of Pharmacy may limit the number of pharmacy students that are allowed to enroll in the MBA.

### **Texas Tech University Health Sciences Center School of Pharmacy Notice of Intent**

1. P-0 and P1 students desiring to enroll in the Pharm.D/MBA program must sign an acknowledgement or disclosure form, signifying an understanding of special curricular requirements for enrolling in the program.

**PharmD-MBA P-0 and P1 Acknowledgement Form:**

<http://www.ttuhschool.edu/sop/mba/admission.aspx>

2. P-0 and P1 students desiring to enroll in the Pharm.D/MBA program must complete a Pharm.D/MBA application form

**PharmD-MBA Application Form:** <http://www.ttuhschool.edu/sop/mba/admission.aspx>

Please send completed forms to: Dr. Roland Patry at [roland.patry@ttuhschool.edu](mailto:roland.patry@ttuhschool.edu)

### **Rawls College of Business Application**

The following applications are due by **April 1** of the year of admission. The admission process for the Rawls College of Business MBA program (HOM) is comprised of three separate applications.

#### **Graduate School Application**

1. Paper or electronic application at: <http://www.depts.ttu.edu/gradschool/admissions/>
2. Requires a \$50.00 fee (\$60.00 for international students)
3. Official transcripts for all schools attended
4. GMAT scores: WAIVED FOR PHARM.D/MBA APPLICANTS

#### **Rawls Business School Application**

1. Complete on-line application at: <http://grad.ba.ttu.edu/gradapplication>
2. Submit current resume as an attachment to [mba@ttu.edu](mailto:mba@ttu.edu)

3. Two letters of recommendation that can be the same letters used for the PharmD application

Health Organization Management (HOM) Program Application

**\*Send when directed by Dr. Patry**

1. MBA-HOM Application Form

**PHARM.D / MBA DUAL DEGREE PROGRAM**

PharmD-MBA Dual Degree Program					
for students classified as P0 or P1 for entering class May 2014 and beyond					
<b>P0 Summer Sessions: 18 credit hours (Note: P1 MBA students will take between their P1 and P2 years- P0 students take before their Fall P1 year)</b>					
Summer 1	ISQS 5345	3 SCH	Statistical Concepts for Business Mgt (Lubbock)		
	ISQS 5331	3 SCH	Information Technology for Managers (on-line)		
	HOM 5307	3 SCH	Managed Care Organ. (Lubbock)		
	HOM 5308	3 SCH	Consumer-Driven Healthcare Operations (Lubbock)		
	ACCT 5301	3 SCH	Financial and Managerial Accounting (Lubbock)		
	FIN 5320	3 SCH	Financial Management Concepts (Lubbock)		
	Plus: 10 orientation units that starts end of May				
	All classes held in residence in Lubbock				
<b>P1 Fall Semester - 18 SCH</b>					
2 weeks before semester - Phar 1102 - 1 SCH Pharmacy Practice, Education and the Sciences					
16 Wk Block	Phar 1512 - 5 SCH	Biochemistry			
	Phar 1415 - 4 SCH	Anatomy & Physiology I			
	Phar 1321 - 3 SCH	Drug Delivery Systems I			
	Phar 1320 - 3 SCH	Immunology			
	Phar 1171 - 1 SCH	Drug Information Clerkship			
	Phar 1131 - 1 SCH	Clinical Immunizations & Admin			
	Phar 1101 - 0 SCH	IPPE 1 Clerkship (No Credit This Semester - Clerkship Runs All Year)			
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>	
	Open				
<b>P1 Spring Semester - 21 SCH</b>					
16 Wk Block	Phar 1316 - 5 SCH	Anatomy and Physiology II			
	Phar 2325 - 5 SCH	Principles of Drug Action-Foundations of Medicinal Chemistry and Pharmacology			
	Phar 1401 - 4 SCH	P'therapy: Non Prescription Medications			
	Phar 2322 - 0 SCH	Drug Delivery System Laboratory (SCH's assigned to Course)			
	Phar 1101 - 1 SCH	IPPE 1 Clerkship (SCH This Semester - Clerkship Runs All Year)			
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>	
	Phar 2322 - 3 SCH	Drug Delivery Sys II		Phar 2223 - 2 SCH	Drug Delivery Systems III
	Phar 1221 - 2 SCH	Principles of Disease		Phar 3159 - 1 SCH	P' Therapy: Integumentary
<b>P1-P2 Summer Sessions: 12 credits</b>					
Summer 2	MGT 5391	3 SCH	Strategic and Global Management (on-line/distance)		
	MKT 5360	3 SCH	Marketing Concepts and Strategies (on-line/distance)		
	ISQS 5330	3 SCH	Managerial Decision Theory (on-line)		
	HOM 5309	3 SCH	Integrated Healthcare Operations (on-line/distance)		
<b>P2 Fall Semester - 21 SCH</b>					
16 Wk Block	Phar 2341 - 3 SCH	Basic Pharmacokinetics			
	Phar 2451 - 4 SCH	P'therapy: Infectious Disorders			
	Phar 2203 - 2 SCH	Pharmaceutical Care Laboratory			
	Phar 2101 - 0 SCH	IPPE 2 Clerkship (No Credit This Semester - Clerkship Runs All Year)			
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>	
	Phar 2202 - 2 SCH	Pharmaceutical Care II		Phar 3257 - 2 SCH	P'Therapy: Endocrine
	Phar 1231 - 2 SCH	Pharm Care Systems-(substitute for HOM 5306)		Phar 4161 - 1 SCH	P'Therapy: Bone & Joint
	Phar 3256 - 2 SCH	P'Therapy: Respiratory		Phar 1241 - 2 SCH	Clinical Research & Lit
				Phar 2153 - 1 SCH	P'Therapy: Blood and Retic.
<b>P2 Spring Semester - 20 SCH</b>					
16 Wk Block	Phar 2352 - 3 SCH	P'Therapy: Cardiovascular		Phar 2104 - 1 SCH	Parenterals with Laboratory
	Phar 3361 - 3 SCH	Case Studies 1			
	Phar 3240 - 2 SCH	Patient Assessment with Laboratory			
	Phar 5372 - 3 SCH	Advanced Leadership and Ethics (substitute for MGT 5372)			
	Phar 2101 - 1 SCH	IPPE 2 Clerkship (Credit This Semester - Clerkship Runs All Year)			
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>	
	Phar 2231 - 2 SCH	Practice Mgt: Law		Phar 3101 - 1 SCH	P'Therapy: Therapeutic Dosing
	Phar 4233 - 0 SCH	Practice Mgt: Financial Management (substituted with FIN 5320)		Phar 3233 - 0 SCH	Practice Mgt: Leadership and Ethics (substituted with PHAR 5372)
	Phar 3158 - 1 SCH	P'Therapy: Reproduction			
	Phar 4166 - 1 SCH	P'Therapy: Pharmacogenetics		Phar 3254 - 2 SCH	P'Therapy: Renal
<b>P2-P3 Summer Sessions: 0 credits mandated</b>					

P3 Fall Semester - 19 SCH + P3 Clerkships						
16 Wk Block	Phar 3462 - 4 SCH	Case Studies II				
	Phar 3355 - 3 SCH	PTherapy: GI, Hepatic and Nutrition				
	Phar 3461 - 4 SCH	PTherapy: Neurosensory and Psychiatry				
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>		
	PHAR 5310	3SCH	Domestic/Global Bus. Cond. Hlth Care (on-line)	PHAR 5371	3 SCH	Managing OB and OD (on-line)
6 Wk Blocks	<b>MUST TAKE 1 ELECTIVE ANY BLOCK</b>		Elective 3 DO NOT TAKE (d)		Elective 5 DO NOT TAKE (d)	
	Elective 2 DO NOT TAKE (d)		Elective 4 DO NOT TAKE (d)		Elective 6 DO NOT TAKE (d)	
	IPPE Clerkships (substitute for HOM 5382)		IPPE Clerkships (substitute for HOM 5382)		IPPE Clerkships (substitute for HOM 5382)	
P3 Spring Semester - 11 SCH + P3 Clerkships						
16 Wk Block	Phar 4463 - 4 SCH	Case Studies 3				
	Phar 4234 - 2 SCH	Practice Mgt: Institutional and Community Operations				
8 Wk Blocks	<b>1st 8-Weeks</b>			<b>2nd 8-Weeks</b>		
	Phar 4264 - 2 SCH	PTherapy: Oncology		Phar 4267 - 2 SCH	PTherapy: Clinical Toxicology	
	Phar 4165 - 1 SCH	PTherapy: Special Populations				
6 Wk Blocks	<b>1st 6-Weeks</b>		<b>2nd 6-Weeks</b>		<b>3rd 6-Weeks</b>	
	Elective 7 DO NOT TAKE (d)		Elective 9 DO NOT TAKE (d)		Elective 11 DO NOT TAKE (d)	
	Elective 8 DO NOT TAKE (d)		Elective 10 DO NOT TAKE (d)		Elective 12 DO NOT TAKE (d)	
	IPPE Clerkships (substitute for HOM 5382)		IPPE Clerkships (substitute for HOM 5382)		IPPE Clerkships (substitute for HOM 5382)	
	(d) Must take ONE elective in ANY Block . All other elective hours in the PharmD curriculum are substituted by PHAR 5310 and PHAR 5371					
P4 Year Advanced Professional Practice Experiences and Grand Rounds						
It is strongly recommended that students take one Administrative/Management rotation as an elective. Can be taken at any campus						
Note: PHAR 5310 and PHAR 5371 take the place of two elective courses. Student must take one pharmacy elective.						

## **MBA COURSE DESCRIPTIONS**

**\*Please see School of Pharmacy program catalogue for PharmD course descriptions**

### **ACCT 5301 Financial and Managerial Accounting (3?:0, F)**

**Prerequisite: B or better in ACCT 2300, ACCT 2301, or BA 3302.** Examines the objectives, structure, and substance of financial reports and the use of accounting in the management of an organization.

### **FIN 5320 Financial Management Concepts (3?:0, F)**

**Prerequisites: FIN 5219, ISQS 5345, and ACCT 5301.** Essential financial management concepts with applications to financial decision making in organizations. Special emphasis on cases and computer financial models.

### **ISOS 5345 Statistical Concepts for Business and Management (3?:0, F)**

Statistical applications using the personal computer with emphasis on proper presentation and interpretation of statistics in managerial settings. Topics include descriptive statistics, graphical methods, estimation, testing, regression, forecasting, and quality control.

### **ISOS 5331 Operations Management and Information Technology (3?:0, F)**

Covers current topics in information technology and operations management and examines how to utilize them to gain competitive advantage.

**HOM 5307 HOM II: Managed Care Organizations (3:?:0, F)**

**Prerequisite:** HOM 5306 with a grade of B or better or consent of instructor. Examines fundamental and contemporary issues in management of costs and payments in the healthcare industry.

**HOM 5308 HOM III: Consumer-Driven Healthcare Design (3:?:0, F)**

**Prerequisites:** HOM 5306 and 5307 with a grade of B or better or consent of instructor. A systems-based view of healthcare organizations emphasizing evaluation, measurement, and quality issues.

**ISOS 5330 Decision Theory and Business Analytics (3:?:0, H)**

Provides an overview of business analytics and examines normative and behavioral theories that drive managerial decision-making.

**MKT 5360 Marketing Concepts and Strategies (3:?:0, H)**

Examines marketing functions, the institutions which perform them and the study of marketing planning, strategy, and tactics. Includes the organization, execution, and control of the marketing effort.

**MGT 5391 Strategic and Global Management (3:?:0, H)**

Global and local strategy formulation and implementation of corporate, business, and functional strategies. (note: Capstone course)

**HOM 5309 HOM IV: Integrated Healthcare Operations (3:?:0, H)**

**Prerequisites:** HOM 5306, 5307, and 5308 with a grade of B or better, or consent of instructor. Analyzes and examines core healthcare operational and management issues from a legal perspective through the use of targeted cases and projects.

**PHAR 5310 Domestic/Global Bus. Cond. In Health Care (3:2:0, O)**

1<sup>st</sup> 8 weeks (cross linked to BECO 5310) **Prerequisite:** Admission to M.B.A. program. Studies markets in which firms compete within the context of a global supply chain, including markets for good and services, financial markets, and labor. Emphasizes how the interactions of these markets affect the formulation and implementation of business strategies.

**PHAR 5371 Managing Org. Behavior & Org. Design (3:2:0, O)**

2<sup>nd</sup> 8 weeks (cross linked to MGT 5371) Examines management of individual, interpersonal, group and intergroup relations, organizational design, and the organization's role in a rapidly changing environmental and global context.