



**MISSISSIPPI STATE**  
UNIVERSITY™

Dr. A. Randle and Marilyn W. White  
Health Professions Resource Center  
P.O. Box GY  
295 E Lee Blvd  
Mississippi State, MS 39762  
P. 662.325.8825  
F. 662.325.1892  
[www.prehealth.msstate.edu](http://www.prehealth.msstate.edu)

October 23, 2019

Dr. Mark E. Keenum, President  
Dr. David Shaw, Provost  
Mississippi State University  
P.O. Box 6018  
Lee Hall, Suite 4000  
Mississippi State, MS 39762

Dear Dr. Keenum and Dr. Shaw,

Please find attached the Memorandum of Agreement between Mississippi State University and University of Tennessee's Health Science Center, College of Pharmacy.

This agreement between MSU and UT's Health Science Center is an educational collaboration for a Bachelor of Science in Biochemistry, Pre-Pharmacy 3 + 1 program. We have worked closely with the Department of Biochemistry, Molecular Biology, Entomology and Plant Pathology to create a degree program which fulfills UT's College of Pharmacy's prerequisite courses and the requirements for a B.S. in Biochemistry simultaneously. After admittance and successful completion of the first year of UT's College of Pharmacy, MSU students will transfer pharmacy courses back to MSU to earn a B.S. in Biochemistry from MSU.

If the MOA meets your approval, please sign and return to the HPRC (mailstop 9536).

Thank you for your continued support of our pre-health professional students.

Sincerely,

Mary Celeste Reese, PhD  
Assistant Clinical Professor  
Director, HPRC

**Memorandum of Agreement**  
between  
**Mississippi State University**  
and  
**University of Tennessee Health Science Center**

This memorandum of understanding summarizes agreements between Mississippi State University and the University of Tennessee Health Science Center (UTHSC), on behalf of the College of Pharmacy, to cooperatively promote successful undergraduate educational experiences resulting in graduation for students who attend both institutions. We are entering into this 3 + 1 Bachelor of Science/Pharmacy Affiliation Agreement and conditional Guaranteed Interview Agreement (GIA) to better serve students and to mutually benefit our institutions. The following understandings will guide this effort, until modified or amended.

Mississippi State University and UTHSC agree to continue to collaborate with the Bachelor of Science in Biochemistry degree, Pre-Pharmacy 3+1 program.

**Purpose and goals**

Through these Affiliation Agreements, Mississippi State University and the University of Tennessee Health Science Center will cooperate to promote successful undergraduate educational experiences resulting in graduation for students who wish to attend both institutions.

The goals of this partnership are to:

1. Retain students at Mississippi State University through graduation of the Bachelor of Science degree.
2. Develop strong academically competitive students for entrance to the Doctor of Pharmacy (PharmD) degree program after 3 years (or equivalent) of outlined undergraduate work at Mississippi State University.
3. Provide students the opportunity to transfer courses completed during the first year at the UTHSC College of Pharmacy back to Mississippi State University for Bachelor of Science degree completion.
4. Establish a seamless pathway for applicants from Mississippi State University to engage with the UTHSC College of Pharmacy.
5. Develop strategies that will help ensure the retention and successful matriculation of Mississippi State University students into the UTHSC College of Pharmacy Doctor of Pharmacy program.

**Recruitment and Admissions**

1. Recruitment of students will be the responsibility of both institutions.
2. Participation in the 3+ 1 Articulation does not assure admission to the University of Tennessee Health Science Center College of Pharmacy.
3. Selection for admission to the College of Pharmacy is competitive and is made by the admissions committee of the program according to its selection process. All UTHSC admissions requirements must be met to uphold any conditional offer of admission.
4. In the beginning of the third year, the student should make application to the University of Tennessee Health Science Center College of Pharmacy, following the procedures of the program.

Students complete their general education program and 30 or more hours of upper level coursework leading to a baccalaureate degree in Biochemistry, during three years of enrollment (or equivalent) on the Mississippi State University campus. Upon successful application to and completion of the first year of professional studies at the UTHSC College of Pharmacy, the student requests a transcript of completed course work from the first year be sent to the Office of the Registrar at Mississippi State University. The transcript will be reviewed and applied to the student's record. Once the student applies for graduation, the appropriate Bachelor of Science degree shall be awarded.

### **GIA Eligibility and Process**

Mississippi State University students meeting the minimum eligibility requirements below, regardless of degree pathway or participation in a 3 + 1 program, will qualify for a guaranteed interview with the UTHSC College of Pharmacy.

1. Students eligible for the GIA must have earned a cumulative science GPA of 2.75 at the time of application.
2. GIA students are required to apply for admission via PharmCAS with an Early Decision designation.

### **Terms and Termination**

This Agreement shall be effective upon signature by both parties and shall have a term of five (5) years after which time it will automatically expire unless the parties execute a written renewal agreement to extend the term of the agreement for an additional five (5) years. The Agreement may be terminated by mutual consent or upon six (6) months written notice. It is agreed that if terminated, both institutions will honor the terms of the agreement until the end of the next admissions application.

The Agreement shall be reviewed during the fifth year to evaluate the progress and the quality of the mutual cooperation.

Each campus will independently of each other make necessary revisions to their portion of the programs without impinging on the other's right to do so. Mississippi State University will ensure that the programs will continue to include the necessary pre-requisite courses to the UTHSC programs.



Dr. Mark E. Keenum  
President  
Mississippi State University

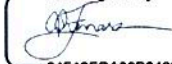
10-28-19  
Date



Dr. David Shaw  
Provost and Executive Vice President  
Mississippi State University

10-25-19  
Date

DocuSigned by:




Anthony A. Ferrara  
Sr. Vice Chancellor for Finance and  
Operations University of Tennessee Health  
Science Center

10/9/2019 | 16:43:52 PDT  
Date



Dr. Lori Gonzalez  
Vice Chancellor for Academic, Faculty and Student Affairs  
University of Tennessee Health Science Center

10-7-19  
Date



Dr. Marie Chisholm-Burns  
Dean and Professor, College of Pharmacy  
University of Tennessee Health Science Center

10/4/19  
Date

**4-UT Curriculum**  
**UTHSC Doctor of Pharmacy (PharmD) Curriculum**

		P1 Year										TOTAL HOURS
<b>Fall</b>	PHCY 1100 Biochemistry 2.5 cr [LG]	PHCY 1101 Fundamentals of Drug Action 2 cr [LG]	PHCY 1110 Dosage Design, Delivery, and Dispensing I 3 cr [LG]	PHCY 1107 Pharmacy Professional Development I 1 cr [P/NP]	PHCY 1104 Foundations of Pharmacy 2.5 cr [LG]	PHCY 1102 Pharmacy Math 1 cr [LG]	PHCY 1111 Self Care and Dermatology 2 cr [LG]	PHCY 1109 Introduction to Therapeutics 2.5 cr [LG]	PHCY 1105 Interprofessional Education and Clinical Simulation (IPEDCS) I 2 cr [P/NP]	PHCY 1106 IPPE I: Introduction to Patient Care (Fall or Spring) 1 cr [P/NP] (1.5 hrs)	<b>18.5 hours</b>	
<b>Spring</b>		PHCY 1202 Pharmacokinetics and Dose Optimization 4 cr [LG]	PHCY 1210 Dosage Design, Delivery, and Dispensing II 2 cr [LG]	PHCY 1207 Pharmacy Professional Development II 0.5 cr [P/NP]	PHCY 1212 Information, Technology, & Safety 2 cr [LG]	PHCY 1209 Immunization Delivery* 0.5 cr [P/NP]	PHCY 1211 Cardiology I 3.5 cr [LG]	PHCY 1201 Cardiology II 3 cr [LG]	PHCY 1205 IPEDCS II 1 cr [P/NP]	<b>17.5 hours</b>		
<b>Summer</b>	PHCY 4000 IPPE Community Pharmacy* 2 cr (2 weeks) [P/NP] (80 hrs)										<b>2 hours</b>	
											<b>TOTAL HOURS</b>	
											<b>38</b>	

LG = Letter grade  
P/NP = Pass/No Pass

Key  
Basic Sciences  
Practice of Pharmacy  
Integrated Therapeutics  
Module  
IPPE = simulation  
Experiential

\*Introductory Pharmacy Practice Experiences (IPPE)  
- Direct patient care = 295 hours  
- Simulation = 18 hours\*  
\*hours subject to change  
**TOTAL HOURS P1-P4 = 313 hours**

IPPE = Interprofessional Education  
IPEDCS = Interprofessional Education and Clinical Simulation  
IPPE = Introductory Pharmacy Practice Experiences

Semester	Where Taken	Course Symbol And Number	Course Title	Hours	Semester Total	Institution Total
Semester 1	MSU	BCH 1001	Intro to Biochemistry	1		
	MSU	EN 1103	English Comp	3		
	MSU	MA 1713	Calculus	3		
	MSU	BIO 1134	General Biology I	4		
	MSU	CH 1213	Chemistry I Lecture	3		
	MSU	CH 1211	Chemistry I Lab	1		
	MSU	FYE	First Year Experience	1	16	
Semester 2	MSU	EN 1113	English Comp II	3		
	MSU	ST 2113	Intro to Stats	3		
	MSU	Bio 1144	General Biology II	4		
	MSU	CH 1223	Chemistry II Lecture	3		
	MSU	CH 1221	Chemistry II Lab	1		
	MSU	Elective	Social Science/Humanities/Fine Art	3	17	
Semester 3	MSU	CH 4513	Organic Chemistry I Lecture	3		
	MSU	CH 4511	Organic Chemistry I Lab	1		
	MSU	BIO 3004	Human Anatomy	4		
	MSU	CO 1003	Fund of Public Speaking	3		
	MSU	Elective	Social Science/Humanities/Fine Art	3	14	
Semester 4	MSU	CH 4523	Organic Chemistry II Lecture	3		
	MSU	CH 4511	Organic Chemistry II Lab	1		
	MSU	BIO 3014	Human Physiology	4		
	MSU	BCH 4603	General Biochemistry I	3		
	MSU	Elective	Social Science/Humanities/Fine Art	3	14	
Semester 5	MSU	BIO 3304	General Microbiology	4		
	MSU	BCH 4414	Protein Methods	4		
	MSU	BCH 4503	Sci Comm Skills (*Optional)	*3	*	
	MSU	BCH 4603	General Biochemistry II	3		
	MSU	BCH 4713	Molecular Biology	3	14-17	
Semester 6	MSU	BCH 3901	Senior Seminar	1		
	MSU	BCH 4623	Spec Tissues	3		
	MSU	BCH 4804	Molecular Methods	4		
	MSU	Elective	Social Science/Humanities/Fine Art	3		

	MSU	Elective	Social Science/Humanities/Fine Art	3	14	
Semester 7	UTHSC	PHCY 1100	Biochemistry	2.5		
(Fall)	UTHSC	PHCY 1101	Fundamentals of Drug Action	2		
	UTHSC	PHCY 1110	Dosage Design, Delivery, and Dispensing I	3		
	UTHSC	PHCY 1107	Pharmacy Professional Development I	1		
	UTHSC	PHCY 1104	Foundations of Pharmacy	2.5		
	UTHSC	PHCY 1102	Pharmacy Math	1		
	UTHSC	PHCY 1109	Intro to Therapeutics	2.5	14.5	
Semester 8	UTHSC	PHCY 1202	Pharmacokinetics and Dose Optimization	4		
(Spring)	UTHSC	PHCY 1210	Dosage Design, Delivery, and Dispensing II	2		
	UTHSC	PHCY 1207	Pharmacy Professional Development II	0.5		
	UTHSC	PHCY 1212	Information, Technology, & Safety	2		
	UTHSC	PHCY 1209	Immunization Delivery	0.5		
	UTHSC	PHCY 1211	Cardiology I	3.5		
	UTHSC	PHCY 1201	Cardiology II	3		
	UTHSC	PHCY 1105	Interprofessional Education and Clinical Simulation II	1	16.5	31
			<b>MSU Upper Level Total Course Hours:</b>			<b>33-36</b>
			<b>Curriculum Total:</b>			<b>120-123</b>