MEMORANDUM OF UNDERSTANDING BETWEEN MARSHALL UNIVERSITY AND GLENVILLE STATE COLLEGE

FOR A FAST-TRACK PROGRAM OF STUDY LEADING TO A DOCTOR OF PHARMACY DEGREE

Marshall University (Marshall), a state of West Virginia institution of higher education, whose address is One John Marshall Drive, Huntington, WV 25755; and Glenville State College (GSC), a State of West Virginia institution of higher education whose address is 200 High Street, Glenville, WV 26351, in order to facilitate the efficient transfer of students between the two institutions, hereby establish this articulated program of study leading to the Doctor of Pharmacy degree (Degree) to be granted by Marshall. Students who have satisfactorily completed the program of study outlined in this Memorandum of Understanding (MOU) and who meet admission requirements for the School of Pharmacy may be admitted to the Marshall University School of Pharmacy (MUSOP) to complete the requirements for the Degree.

I. CURRICULUM

Marshall and GSC agree that the courses listed in *Appendix A* are equivalent regarding content and student learning objectives. The successful completion of these courses is required for admission to the Program as outlined in this MOU.

GSC faculty and staff will advise students working toward the Degree to ensure their previous, current, and future courses fulfill the requirements listed herein. This advising includes enrollment in those courses that are prerequisite requirements for the courses listed in *Appendix A*. Course substitutions may be available upon the written approval of Marshall's Dean of the School of Pharmacy.

Students attending GSC who elect to pursue the Program will complete the courses listed in *Appendix A* through GSC. Upon admission to the MUSOP, the required courses will be accepted by Marshall as equivalent to corresponding pre-pharmacy Core Course Requirements.

Upon successful completion of the Year 4 curriculum outlined below at Marshall, students will receive a Bachelor of Science in Biology, Bachelor of Arts in Chemistry, or Bachelor of Science in Interdisciplinary Studies from GSC.

Students who do not complete the sequence of courses outlined in this MOU may require additional time and expense to complete the Degree.

Provided that, nothing herein shall be interpreted as granting any student automatic admission to the MUSOP.

II. APPLICATION TO PROGRAM

The normal admission process to the Pharmacy Program includes a review of an applicant's performance relative to the Program's admission requirements, an on-campus interview, and an admission decision. Typically, the Program faculty will invite approximately 40 percent of applicants for an on-campus interview.

For the purpose of this MOU, Marshall will grant interviews to all GSC students who meet the minimum admission requirements as identified by the appropriate GSC Dean or faculty group. GSC will submit a list of qualified students to the MUSOP, Office of Student Affairs, prior to August 1 of each year.

Each year, Marshall will accept up to 15 GSC students who meet admission requirements. Marshall may grant more admissions depending upon admission decisions made for other applicants. The minimum admission requirements from High School into Glenville State College's Fast Track program into Marshall's School of Pharmacy are:

 Minimum 3.0 high school GPA and be eligible to take college algebra without supplement and college composition without supplement.

The minimum admission requirements for undergraduate students into Glenville State College Fast Track Program into Marshall's School of Pharmacy are:

 Have a 2.5 cumulative college GPA and be eligible to take or have completed college algebra.

Students must maintain a cumulative 2.5 GPA while at GSC to remain in the Glenville State College Fast Track Program. In addition, Marshall will provide virtual pharmacy peer mentors, specific GSC-only visit dates, and pharmacy personnel at GSC's university open houses (as requested).

The minimum admission requirements from Glenville State College's Fast Track Program into Marshall's School of Pharmacy are:

- 1. Minimum cumulative grade point average of 3.0 at GSC for all courses listed (a grade of C or better must be earned for each of these courses) in *Appendix A*;
- Completed application for "Priority Admission" by September 15th the year before they
 intend to start in the pharmacy program through the online Pharmacy College Application
 Service (PharmCAS, at http://www.pharmcas.org);
- 3. Submission of the Marshall's School of Pharmacy supplemental application and all required application fees by the date of on-campus interview;
- 4. Successful completion of an on-campus admissions interview during the junior year (interviews are normally held in late September/early October);

- 5. Student shall be responsible for payment of all fees associated with admission to the Program, including but not limited to the application fee;
- 6. Glenville State College will provide MU with students' official transcripts by June 30th.

Following completion of the first year of Marshall University's pharmacy graduate program, MU will send an official transcript to GSC for students admitted through the GSC Fast Track program. Courses completed in the first year at MU will be reverse transferred to GSC for credit, and students will be awarded a GSC Bachelor degree once all necessary criteria are met.

III. TERMS OF THE AGREEMENT

This MOU supersedes all currently existing articulation agreements or MOUs between Marshall and GSC regarding this Program. Students who started their coursework during a previous agreement may proceed as outlined in that agreement with the expectation that all students will complete the GSC course work by the end of the 2020-21 academic year.

Marshall and GSC agree to monitor and support the provisions of this MOU to ensure program consistency and quality, and transferability of the benefit of the students of both institutions. Marshall and GSC agree to coordinate changes in the course content or requirements for any courses listed in the articulation agreement in order to ensure continued comparability between the courses offered on each campus.

Both institutions will maintain their accreditation with the regional accrediting agency overseeing each institutions' operations. Marshall shall maintain its accreditation with the Accreditation Council for Pharmacy Education.

Interpretation of this agreement will be made within the laws of the State of West Virginia. Marshall and GSC may modify this MOU as necessary due to changes in curriculum or graduation requirements implemented by either institution, upon mutual written agreement of the parties. This process will be the responsibility of the appropriate deans at both institutions. This MOU may be terminated upon thirty (30) days written notice to the other party: provided that the students currently pursuing a degree shall be permitted to complete the degree.

Students pursuing the Degree through the MOU will be bound by the curriculum requirements in effect at the time they are officially accepted into the MUSOP program. The attached curriculum requirements will be in effect until officially changed and agreed upon, in writing, by both institutions.

Jerone A. Gilbert, Ph. D.,
President, Marshall University

Jaine R. Taylor, Ph. D.,
Senior Vice President and Provost,
Marshall University

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Senior Vice President and Provost,
Marshall University

Jaine R. Taylor, Ph. D.,
Provost and Vice President for
Academic Affairs,
Glenville State College

Date

Chair, Science and Mathematics

Glenville State College

The terms of this agreement are hereby approved on March 15, 2021, by the respective

administration of the two schools.

Gayle A. Brazeau

Dean, School of Pharmacy

APPENDIX A

COURSE EQUIVALENCIES FOR SCHOOL OF PHARMACY DOCTOR OF PHARMACY DEGREE

CORE COURSE REQUIREMENT	Marshall Course	GSC EQUIVALENT
Biology: Principles of Biology w/lab	BSC 120	BIOL 120 (4)
Biology: Principles Biology w/lab	BSC 121	BIOL 121 (4)
Biology: Human Anatomy	BSC 227	BIOL 309 (4)
Biology: Human Physiology	BSC 228	BIOL 310(4)
Biology: Microbiology and Human Disease	BSC 250	BIOL 361 (4)
Chemistry: Principles Chemistry I w/lab	CHEM 211 and 217	CHEM 101 (4)
Chemistry: Principles Chemistry II w/lab	CHEM 212 and 218	CHEM 102 (4)
Chemistry: Organic Chemistry I	CHEM 355	CHEM 301 (4)
Chemistry: Organic Chemistry II w/lab	CHEM 356 and 361	CHEM 302 (4)
English: Beginning Composition	ENG 101	ENGL 101 (3)
English: Advanced Composition	ENG 201	ENGL 102 (3)
Mathematics: Calculus with Analytic Geometry I	MTH 229	MATH 202 (4)
Mathematics: Statistics	STA 225	MATH 256 (3)
Physics: College Physics 1 w/lab	PHY 201/201	PHYS 201 (4)

ADDITIONAL CURRICULUM REQUIREMENTS FOR GSC STUDENTS MATRICULATING TO MARSHALL UNIVERSITY'S SCHOOL OF PHARMACY THAT WILL RESULT IN RECEIPT OF BS BIOLOGY, BA CHEMISTRY, OR BS INTERDISCIPLIANRY STUDIES FROM GSC:

Years 1-3 (Glenville State College BS Biology)

Fall 1		Spring 1		
Course	Credits	Course	Credits	
CHEM 101	4	CHEM 102	4	
BIOL 120	4	BIOL 121	4	
MATH 115	3	MATH 256	4	
ENGL 101	3	ENGL 102	3	
BIOL 193	1			
	15		15	
Fall	2	Sprin	g 2	
CHEM 301	4	CHEM 302	4	

BIOL 309	4		BIOL 310	4	
MATH 120	3		MATH 202	4	
ENGL 20X	3		BIOL 371 or 456	4	
BIOL 293	1		-270		
		15			16
Fali	3		Spring 3		
BIOL 361	4		PHYS 202	4	
PHYS 201	4		BIOL 371 or 456	4	
HIST 20X	3		HIST 20X	3	
CSCI 101	3		PSYC/SOC	3	
FNAR	3			1	
		17			14

Remaining Glenville State College Biology BS requirements to be satisfied by year four:

- BIOL 499/497 3 hrs met by PHAR 541
- BIOL 493 1 hr met by PHAR 811 or PHAR 819
- One course from the area of Cellular/Physiology could be met by either PHAR 542 or PHAR 546
- 10 hours of major electives: to be met by additional MU pharmacy courses
- Elective hours: to be met by additional MU pharmacy courses

Years 1-3 (Glenville State College BA Chemistry)

Fall	1	Sprin	ig 1
Course	Credits	Course	Credits
CHEM 101	4	CHEM 102	4
BIOL 120	4	BIOL 121	4
MATH 115	3	MATH 256	3
ENGL 101	3	ENGL 102	3
PED 201	1		
	15		14
Fall 2	2	Sprin	g 2
CHEM 301	4	CHEM 302	4
BIOL 309	4	BIOL 310	4
MATH 120	4	MATH 202	4
ENGL 20X or	3	CART 101	3
CHEM 321	4		1 .
CHEM 293	1		
	16/17	71-2	15
Fall 3	3	Sprin	g 3
BIOL 361	4	PHYS 202	4
CHEM 321 or	4	HIST 20X	3
ENGL 20X	3		
PHYS 201	4	CSCI 101	3
HIST 20X	3	PSYC/SOC	3

	FNAR	3
14/15		16

Remaining Glenville State College Chemistry BA requirements to be satisfied by year four:

- CHEM 380 Biochemistry (4) satisfied by PHAR 546 Pharmaceutical Biochemistry (4)
- CHEM 493 Senior Research Seminar (2) satisfied by PHAR 521 Integrated Lab I (2)
- Chemistry Electives (7) satisfied by PHAR 544 Principles of Disease and Drug Action (4) and PHAR 531 Biopharmaceutics I (3)
- Remaining 16 hours of general electives to achieve 120 hours satisfied by PHAR 541 (4), 542 (4), 511 (1), 531 (3), and 543 (4).

Years 1-3 (Glenville State College BS IDS Studies in General Science and Pharmacy)

Fall 1		Spring 1	
Course	Credits	Course	Credits
CHEM 101	4	CHEM 102	4
BIOL 120	4	BIOL 121	4
MATH 115	3	MATH 256	3
ENGL 101	3	ENGL 102	3
PED 201	1		
	15		14
Fall 2		Spring 2	
CHEM 301	4	CHEM 302	4
BIOL 309	4	BIOL 310	4
MATH 120	4	MATH 202	4
HIST 201, 202, 208 (OR) POSC 203	3	CART 101	3
501 Supply 1	15		15
Fall 3		Fall 4	
BIOL 361	4	CSCI 101	3
HIST 201, 202, 207, 208 (OR) POSC 203	3	ECON 201, 202, GEOG 203,	3
		PSYC 201, SOCL 205 (OR)	
		SOCS 225	
PHYS 201	4	ENGL 203, 204, 205 (OR)	3
		206	
CART 101	3	GENERAL ELECTIVE	3
	14		12

The remaining 35 hours to complete the BS IDS in General Science and Pharmacy will come from the transfer of the first year PHAR courses from MU to GSC.

Year 4 (Marshall Univ. Pharm.D.)

Fall		Spring	
Course Credits		Course	Credits
PHAR 541 Pharmacy Practice I		PHAR 543 Pharmacy Practice II	

Total	18	Total	18
		PHAR 819 IPPE Longitudinal	
PHAR 522 Fund of Med Chem		PHAR 811 IPPE Community 1 OR	
PHAR 531 Biopharmaceutics I		PHAR 545 Therapeutics 1 – OTC	
PHAR 547 Clinical Immunology		PHAR 521 Integrated Lab I	
PHAR 546 Pharm Biochemistry		PHAR 532 Biopharmaceutics II	
Microbiology		and Drug Action	
PHAR 542 Immunology and		PHAR 544 Principles of Disease	

Notes:

Students attending GSC who elect to pursue the Pharm.D. Degree program at Marshall University will have completed all courses listed prior to matriculation within the pharmacy program through GSC or have received transfer credit for courses completed at peer institutions. Upon transfer to Marshall University School of Pharmacy (MUSOP), the listed courses will be accepted by Marshall University as meeting the required pre-pharmacy course requirement indicated for that course.