## Agreement for an Intercollegiate Program between

### Concordia University Wisconsin School of Pharmacy and

# the Board of Regents of the University of Wisconsin System on behalf of the University of Wisconsin-Milwaukee

This document states the terms of an articulation agreement for a program leading to a Bachelor of Science Degree with a major in Biological Sciences from the University of Wisconsin-Milwaukee and a Doctor of Pharmacy degree from Concordia University Wisconsin, hereafter called "the 3+4 program" or "the program."

This agreement is effective as of the date it is fully executed by both parties and will remain in effect for a period of one year. Thereafter, this agreement shall be automatically extended on an annual basis. Either party may terminate this agreement by written notice to the other party by March 1<sup>st</sup> of each year. In the event of a termination for any reason by either party, the students presently accepted in the Concordia University Wisconsin School of Pharmacy will be permitted to complete the program. This agreement may be modified at any time with the written agreement of both parties.

Both institutions enter into this agreement in order to better facilitate the admission of University of Wisconsin-Milwaukee students to the Concordia University Wisconsin School of Pharmacy. The General Terms of the Agreement are as follows:

1. The University of Wisconsin-Milwaukee agrees to grant a Bachelor of Science Degree with a major in Biological Sciences to those students who successfully complete at least 90 credits at the University of Wisconsin-Milwaukee, meet both the campus and College of Letters and Science general education degree requirements (including at least 15 advanced credits in the major in residence at UWM – see sample 3-year plan) specified in the University of Wisconsin-Milwaukee catalog at the time of admission to the University of Wisconsin-Milwaukee, and successfully complete 32 doctor of pharmacy credits listed immediately below at the Concordia University Wisconsin School of Pharmacy.

CUW Course	UWM Course Dept	UWM course Number	# of credits
Pharm 310 - Pharmacy Biochemistry	Chemistry	501	4*
	Biological	202 &	
Pharm 312 - Pharmacy Anatomy & Physiology	Sciences	203	5*
Pharm 314 - Pharmacy Microbiology,	Biological		
Immunology, Molecular Biology	Sciences	U	4
Pharm 320 - Pharmaceutics I	L&S NS elective	LL	2
Pharm 322 - Pharmaceutics II	L&S NS	U	4

Pharm 330 - Pharmacology & Medicinal	Biological		
Chemistry I	Sciences	U	2
Pharm 340 - Pharmacy and Healthcare System	L&S Elective	LL	3
Pharm 424 Applied Pharmacokinetics	Chemistry	U	1
Pharm 432 - Pharmacology & Medicinal	Biological		
Chemistry II	Sciences	U	2
Pharm 434 - Pharmacology & Medicinal	Biological		
Chemistry III	Sciences	U	2
Pharm 442 - Social & Behavioral Pharmacy	L&S SS Breadth	LL	2
Pharm 460 - Medical Literature Evaluation	L&S NS	U	1
		Total:	32

<sup>\*</sup>If a student takes these courses at the University of Wisconsin Milwaukee, Concordia University Wisconsin School of Pharmacy equivalent credits cannot transfer back.

Concordia University Wisconsin School of Pharmacy agrees to grant a Doctor of Pharmacy degree to those University of Wisconsin-Milwaukee students who gain acceptance into Concordia University Wisconsin School of Pharmacy, successfully complete the above-referenced University of Wisconsin-Milwaukee requirements, and successfully complete the doctor of pharmacy degree requirements specified in the Concordia University Wisconsin School of Pharmacy catalog at the time of admission to Concordia University Wisconsin School of Pharmacy.

If the University of Wisconsin-Milwaukee materially changes its requirements for a biological sciences major, its general education requirements, or its graduation requirements, or if the Concordia University Wisconsin School of Pharmacy materially changes its graduation requirements, it will notify the other party as soon as reasonably practicable. In such case, the parties will attempt to renegotiate this agreement in good faith, but if the parties are unable to reach agreement, the agreement will automatically terminate at the end of the current contract period.

The University of Wisconsin-Milwaukee agrees to provide the following, or comparable, mathematics, science and liberal studies coursework. This coursework must be completed or in progress at the time a University of Wisconsin-Milwaukee student applies to Concordia University Wisconsin School of Pharmacy. This coursework must be completed by the time a University of Wisconsin-Milwaukee student starts classes at Concordia University Wisconsin School of Pharmacy.

Science Core Courses	UW Milwaukee Course	Credits
Biology I + lab	BIO 150 – Foundations of Biological Sciences I	4

		1
Biology II + lab	BIO 152 – Foundations of Biological Sciences II	4
General Chemistry I + lab	CHEM 102 – General Chemistry I	5
General Chemistry II + lab	CHEM 104 – General Chemistry II	5
Organic Chemistry I	CHEM 343 – Organic Chemistry I	3
Organic Chemistry II	CHEM 345 – Organic Chemistry II	3
Organic Chemistry lab	CHEM 344 – Organic Chemistry Laboratory	2
Physics I (with or without lab)	PHYSICS 120 – General Physics I	4
One or more advanced science elective course(s)*, if needed	BIO 315 – Cell Biology BIO 325 - Genetics	
	minimum	32 credits
Support Courses	minimum	32 credits
Support Courses  Calculus	MATH 231 – Calculus and Analytical Geometry I MATH 213 – Calculus with Life Sciences Applications MATH 211 – Survey in Calculus and Analytic Geometry	32 credits
	MATH 231 – Calculus and Analytical Geometry I MATH 213 – Calculus with Life Sciences Applications	
Calculus	MATH 231 – Calculus and Analytical Geometry I MATH 213 – Calculus with Life Sciences Applications MATH 211 – Survey in Calculus and Analytic Geometry MTHSTAT 215 – Elementary Statistics	4
Calculus	MATH 231 – Calculus and Analytical Geometry I MATH 213 – Calculus with Life Sciences Applications MATH 211 – Survey in Calculus and Analytic Geometry MTHSTAT 215 – Elementary Statistics BIO SCI 465 – Biostatistics	3
Calculus  Statistics  English Composition  Interpersonal Communication or	MATH 231 – Calculus and Analytical Geometry I MATH 213 – Calculus with Life Sciences Applications MATH 211 – Survey in Calculus and Analytic Geometry  MTHSTAT 215 – Elementary Statistics BIO SCI 465 – Biostatistics  ENG 102 – Critical Writing and Research  COMM 101 – Interpersonal Communication	3

TOTAL PRE-PHARMACY CREDITS	64
	CREDITS
	TOTAL PRE-PHARMACY CREDITS

2. In order to be eligible for the 3+4 program, student additionally must complete the courses below to fulfill UWM College of Letters and Science degree requirements.

#### Courses/Requirements to be taken at UWM in addition to Pre-requisite courses listed:

BIO SCI 325 - Genetics - 4 credits

BIO SCI 383 - Microbiology - 4 credits

BIO SCI 315 - Cell Biology - 3 credits

BIO SCI 316 – Cell Biology Lab – 2 credits

BIO SCI 670 - Senior Seminar in Biological Sciences or BIO SCI 699 - Research - 1 credit

PHYSICS 122 - General Physics II - 4 credits

PHYSICS 121 or 123 - General Physics Lab - 1 credit

Oral and Written Communication Part B (OWCB)/Humanities – 3 credits

GER Arts Requirement – 3 credits

Humanities – 12 credits total (3 credits should overlap with OWCB requirement)

Social Science – 12 credits total (Econ 103 or 104 will cover 3 credits)

Cultural Diversity\* - 3 credits

Courses with International Content\*\*-9 credits

- = Need to reach 90 credits minimum at UWM
- \*Cultural Diversity should overlap with either GER Arts, Humanities or Social Science
- \*\*International courses should overlap with either Humanities or Social Science
- \*\*\*Depending on which Communication course selected, it will count towards Humanities or Social Science; COMM 101 = Social Science or COMM 103 = Humanities
- -If the student does not have at least 2 years of one foreign language in high school that would need to be added to the credit total and degree plan
- \*For the 3+4 program students must have a "C" or better in the pre-pharmacy coursework and maintain at least a 2.5 GPA average in all courses counting in the Biological Sciences major taken at both UWM and CUW

With the completion of the Bachelor's degree through UWM, students participating in this 3+4 program are exempt from the religion requirement for Concordia University Wisconsin School of Pharmacy

One possible three-(3-)year plan for courses taken at the University of Wisconsin-Milwaukee with a major in Biological Sciences is shown below. Courses in bold (does not include general education credits) <u>must be completed by the time a University of Wisconsin-Milwaukee student starts classes at Concordia University Wisconsin School of Pharmacy.are required for admission to the Concordia University Wisconsin School of Pharmacy.</u>

Possible UWM	Course sequence	
Semester 1	Semester 2	
CHEM 102 – 5 CREDITS	CHEM 104 – 5 CREDITS	
BIO SCI 150 – 4 CREDITS	BIO SCI 152 – 4 CREDITS	
MATH 115 – 4 CREDITS	MATH 213 – 4 CREDITS	
ENGLISH 101 – 3 CREDITS	ENGLISH 102 – 3 CREDITS	
Total credits: 16	Total credits: 16	
Semester 3	Semester 4	
CHEM 343 – 3 CREDITS	CHEM 344 – 2 CREDITS	
BIO 325 – 4 CREDITS	CHEM 345 – 3 CREDITS	
MTHSTAT 215 OR BIO 465 – 3 CREDITS	COMM 101 OR 103 – 3 CREDITS	
ECON 103/104 – 3 CREDITS	BIO 315 – 3 CREDITS	
OWCB/HU-3 CREDITS	GER ARTS – 3 CREDITS	
	L&S NS 111 – 1 CREDIT (optional)	
Total credits: 16	Total credits: 15	
Semester 5	Semester 6	
PHYSICS 120 – 4 CREDITS	PHYSICS 122 – 4 CREDITS	
BIO 383 – 4 CREDITS	PHYISCS 121/123 – 1 CREDIT	
HU/CD - 3 CREDITS	HU/INT'L - 3 CREDITS	
SOC SCI/INT'L – 3 CREDITS	HU/INT'L - 3 CREDITS	
BIO 316 – 2 CREDITS	SOC SCI – 3 CREDITS	
	BIO 670 OR BIO 699 RESEARCH – 1 CREDIT	
Total credits: 16	Total credits: 15	
Total Minimum UWM credits = 90 (plan currently has 94 credits)		

- 3. Concordia University Wisconsin School of Pharmacy agrees to guarantee an interview to University of Wisconsin-Milwaukee students in the "3+4" program who have met the following criteria:
  - a. Successful completion of the pre-pharmacy coursework with a C- or better at the University of Wisconsin-Milwaukee (for the 3+4 program students must have a "C" or better in pre-pharmacy coursework and maintain at least a 2.5 GPA average in all courses counting in the Biological Sciences major taken at both UWM and CUW).
  - b. Submission of the PharmCAS application by March 1 the year they plan to enroll in the PharmD program.
  - c. Minimum cumulative grade point average of 2.75 out of 4.0 in all UWM coursework.
  - d. A composite score of 35 or higher on the Pharmacy College Admission Test (PCAT).

- 4. With the student's prior written consent, the University of Wisconsin-Milwaukee will identify potential students for the 3+4 program with Concordia University Wisconsin School of Pharmacy. Concordia University Wisconsin School of Pharmacy will assist in mentoring those students while they are enrolled at the University of Wisconsin-Milwaukee. Concordia University Wisconsin School of Pharmacy will offer interviews to all University of Wisconsin-Milwaukee students in the "3+4" program who meet the admissions criteria (stated above in number 4).
- 5. Each University of Wisconsin-Milwaukee pre-pharmacy student requesting admission to Concordia University Wisconsin School of Pharmacy will submit the appropriate application for admission, application fee, test scores, official transcript from the University of Wisconsin-Milwaukee, and any other necessary transcripts or credentials in support of his/her application, as required by the policies of Concordia University Wisconsin School of Pharmacy.
- 6. This agreement is not assignable by either party without the prior written consent of the other party.

### **APPROVALS**

Dean L. Cerneson	12/11/17
Dean L. Arneson, Pharm.D., PhD	
Dean	
Wendy Rheault, PT, PhD, Provost	
Concordia University Wisconsin School of Pharmacy	
William R Oong	12-18-17
DrWilliam 🕅. Cario, PhD, Senior Vice President of Academics	Date
Concordia University Wisconsin	12/5/17
Johannes Britz, DPhil, Provost & Vice Chancellor for Academic Affairs	Date
The Board of Regents of the University of Wisconsin System on	
Behalf of the University of Wisconsin-Milwaukee	
READ AND UNDERSTOOD:	*
) ore (	12/5/17
David P. Clark, Ph.D., Interim Dean, College of Letters and Science	Date
University of Wisconsin-Milwaukee	