## AGREEMENT FOR DUAL DEGREE BACHELORS OF SCIENCE AND DOCTOR OF PHARMACY PROGRAMS

## UNIVERSITY OF SAINT JOSEPH/JOHNSON & WALES UNIVERSITY

WHEREAS University of Saint Joseph, West Hartford, Connecticut, through its School of Pharmacy, has established a mission to educate students from diverse backgrounds for careers in pharmacy and the pharmaceutical sciences:

WHEREAS Johnson & Wales University, Providence, Rhode Island, provides education in the humanities, social sciences, mathematics and the sciences for students from diverse backgrounds; and

WHEREAS both University of Saint Joseph and Johnson & Wales University are interested in increasing the number of students with diverse backgrounds in the professional field of pharmacy;

It is hereby agreed by University of Saint Joseph and Johnson & Wales University that both institutions will work cooperatively to recruit and facilitate the entry of students of diverse backgrounds into the field of pharmacy by developing a joint program leading to the Biology-Bachelor of Science degree from Johnson & Wales University (Biology-B.S.) and the Doctor of Pharmacy (Pharm . D.) degree from University of Saint Joseph. Students will be accepted into each institution's program based solely upon each institution's admissions policies. Attached as Appendix A are the first year courses to be taken at University of Saint Joseph 's that will, upon successful completion, be accepted by JWU and applied to satisfy credit and/or course requirements of the JWU Biology-B.S. Students are responsible for meeting Johnson & Wales University residency requirements as stated in the university catalog. University of Saint Joseph courses are not considered when determining residency requirements.

- A. University of Saint Joseph, through the School of Pharmacy, hereinafter referred to as School of Pharmacy, agrees to:
  - Permit qualified Johnson & Wales University students, who have successfully completed a
    prescribed three-year course of study leading to a Biology-B.S. and have been admitted into the
    School of Pharmacy, to enroll in the School of Pharmacy for the three calendar-year Pharm.
    D. program.
  - 2. Give priority in admission to dual degree program applicants from Johnson & Wales University when those applicants have completed the first three years of the Biology B.S. in the dual degree program, satisfied admissions requirements of the Pharm. D. program, and are otherwise competitive with other applicants competing for admission to the Pharm. D. program.
  - 3. Encourage students who have entered the School of Pharmacy under this agreement to return to Johnson & Wales University after successful completion of the first professional year of the Pharm. D. program for their commencement ceremony and to then continue their studies in the

School of Pharmacy for completion of the final years of their professional education for award of the Pharm. D. degree.

- 4. Provide Johnson & Wales University with final grades and other reasonably requested information by JWU concerning the course work completed by JWU students in the program in order to allow JWU to properly assess the academic progress of its students.
- 5. Assist Johnson & Wales University by providing information on the School of Pharmacy's prepharmacy requirements to health professions advisors and other appropriate faculty or staff.
- 6. Participate in invitational conferences and symposia sponsored by Johnson & Wales University to promote career awareness in pharmacy and/or to promote the dual degree program.
- 7. Identify a faculty or staff person from the School of Pharmacy to maintain ongoing contact with health professions advisors and/or other appropriate faculty or staff personnel at Johnson & Wales University.

## B. Johnson & Wales University agrees to:

- Provide a program of instruction designed to qualify students of diverse backgrounds for admission to, retention in, and graduation from the Pharm. D. program as detailed in the appropriate requirement documents which shall be provided by the School of Pharmacy. The program of instruction will be comprised of courses which have been accredited by the appropriate accrediting body and will be provided to the School of Pharmacy for review prior to implementation.
- 2. Work to ensure that each student who is considered for admission to the Pharm. D. program has completed or will be able to complete the prescribed program of study in preparation for transfer to the School of Pharmacy.
- 3. Cooperate with the School of Pharmacy in efforts to recruit and increase the number of students of diverse backgrounds in the profession of pharmacy and to advertise the availability of the dual degree program as an incentive to students who are interested in the study of pharmacy.
- 4. Accept University of Saint Joseph's credit as follows: Students successfully completing 21 semester credits in the first year at University of Saint Joseph will fulfill the remaining courses in the Biology B.S. at JWU as follows (APPENDIX A):
  - a. Free Electives (9 semester credits)
  - b. Major Electives (6 semester credits)
  - c. Applied Experiential Learning (6 semester credits)

Students completing fewer than all 21 semester hours will receive transfer credit only for those courses successfully completed at University of Saint Joseph with earned grades of C or higher.

- 5. Award the Biology-B.S. degree to dual degree program students who have successfully completed the first professional year of Pharm. D. program at the School of Pharmacy, after having successfully completed the prescribed three academic years of study at Johnson & Wales University under this agreement, without the assessment of additional tuition between that time and the year in which the degree is awarded.
- 6. Strongly encourage those students to return to the School of Pharmacy after receipt of their Biology-B.S. degree from Johnson & Wales University for completion of the professional education in pharmacy.
- 7. Insofar as Johnson & Wales University sponsors annual health careers awareness programs, it will discuss careers in pharmacy.
- C. Both University of Saint Joseph and Johnson & Wales University agree that:
  - 1. The Pharm. D. degree will not be awarded without successful completion of all requirements for the Biology-B.S. degree.
  - 2. A student in the dual degree program who is not in good academic standing at the end of the first professional year of the Pharm. D. program will revert back to Johnson & Wales University to complete the Bachelor of Science degree.
  - 3. Each institution will publicly announce the existence of this agreement and will provide in their respective catalogs/institutional websites links to the appropriate/relevant content of this agreement. The information contained in this agreement may be marketed to potential students/students, staff, parents and guardians, as deemed appropriate in the sole discretion of each respective institution.
- D. It is agreed between University of Saint Joseph and Johnson & Wales University that each student participant, while pursuing studies at the respective institution, shall be considered for academic, financial and such other purposes, as a regular full-time student of the institution then in attendance. Each student participant shall be subject to all rules, regulations, policies and procedures of both institution during the entire duration of the program. Johnson & Wales University and University of Saint Joseph agree that they will, to the extent permitted under applicable law, inform the other institution of any alleged violations of their respective policies or procedures by any student enrolled in the program. Each institution will request each student, as a condition of enrollment, to agree in writing that he/she shall abide by such rules, regulations, policies and procedures of such institution.

It is understood and agreed that this Agreement shall insure solely to the benefit of the parties and that this Agreement shall not be construed, interpreted or deemed in any matter to create any third party beneficiaries, including, but not limited to, pharmacy students, employees of either party, or third parties.

This dual degree program shall become effective on the date of the final signature by the appropriate officials of each institution and shall remain in effect for a continuous period unless expressly modified by agreement of both institutions or terminated by either institution upon giving ninety (90) days' written notice of the other. If this agreement is either modified or terminated, students participating in the program established by the agreement shall be permitted to complete their studies in the Pharm. D. program.

APPROVED: For University of Saint Joseph APPROVE D: For Johnson & Wales University

Marie Bernado-Sousa , LP.D. President , Providence Campus

Joseph R. Ofusu, Pharm. D., R.Ph. Dean, School of Pharmacy

June 24, 2020

Michelle Kalis, Ph.D. Provost

## APPENDIX A

| JOHNSON & WALES UNIVERSITY   |             | University of Saint Joseph  |              |
|--|-------------|---|--------------|
| BIOLOGY B.S.   |             | DOCTOR OF PHARMACY: PHARM D.  |              |
| Major Courses  | Sem.<br>Hrs |   | Sem.<br>Hrs. |
| BIO1022 General Biology-Organismal   | 3           |   |              |
| BIO1026 General Biology Laboratory-Organismal                                      | 1           |   |              |
| BIO2001 Genetics   | 3           |   |              |
| BIO3040 Molecular Biology  | 3           |   |              |
| BIO3046 Molecular Biology Laboratory   | 1           |   |              |
| BIO3100 Coastal Ecology  | 3           |   |              |
| BIO Coastal Ecology Laboratory   | 1           |   |              |
| BIO4020 Integrative Biology  | 3           |   |              |
| BIO4026 Integrative Biology Laboratory   | 1           |   |              |
| BIO4100 Senior Seminar in Biology  | 3           |   |              |
| Major Electives  |             |   |              |
| BIO2021 Functional Human Anatomy &   | 3           |   |              |
| BIO2026 Functional Human Anatomy Laboratory  | 1           |   |              |
| BIO2041 Human Physiology &   | 3           |   |              |
| BIO2046 Human Physiology Laboratory  | 1           |   |              |
| BIO2201 General Microbiology &   | 3           |   |              |
| BIO2206 General Microbiology Laboratory  | 1           | DHCV 704 Pl 4' 1 1 1 1'   | 1 2          |
| Major Elective   | 3           | PHCY 704 Pharmaceutical calculations  | 3            |
| Major elective   | 3           | PHCY 731 Pharmacochemistry of the Cardiovascular,<br>Renal and Blood Clotting Systems | 3            |
| Related Professional Studies   |             |   |              |
| CAR0010 Career Management  | 1           |   |              |
| CHM1011 General Chemistry I  | 3           |   |              |
| CHM1016 General Chemistry I Laboratory   | 1           |   |              |
| CHM1022 General Chemistry II   | 3           |   |              |
| CHM1026 General Chemistry II Laboratory  | 1           |   |              |
| CHM2011 Organic Chemistry I  | 3           |   |              |
| CHM2016 Organic Chemistry I Laboratory   | 1           |   |              |
| CHM2022 Organic Chemistry II   | 3           |   |              |
| CHM2026 Organic Chemistry II Laboratory  | 1           |   |              |
| Arts & Sciences Core Experience  |             |   |              |
| <b>Communications Foundation Courses</b>   |             |   |              |
| ENG1020 English Composition  | 3           |   |              |
| ENG1021 Advanced Composition & Communication                                       | 3           |   |              |
| ENG1030 Communication Skills   | 3           |   |              |
| Integrative Learning   | _           |   |              |
| ILS2000 Integrative Learning 2000-level<br>ILS4000 Integrative Learning 4000-level | 3 3         |   |              |
| Arts & Humanities  |             |   |              |
| PHIL3240 Ethics: A Global Perspective  | 3           |   |              |
| One course from ART, HIST, HUM, LIT, PHIL or REL                                   | 3           |   |              |
| Mathematics  |             |   |              |
| MATH1040 Calculus I  | 3           |   |              |
| MATH2010 Introduction to Biostatistics   | 3           |   |              |

| Science  |     |  |    |
|--|-----|--|----|
| BIO1011 General Biology – Cellular             | 3   |  |    |
| BIO1016 General Biology – Cellular             | 1   |  |    |
| Social Science                                 | 3   |  |    |
| PSYC1001 Introductory Psychology               | 3   |  |    |
| One from ECON, LEAD, PSCI, ANTH or SOC         | 3   |  |    |
| Arts & Sciences Electives                      |     |  |    |
| PHY1011 General Physics I                      | 3   |  |    |
| or PHY2011 Physics I                           |     |  |    |
| PHY1016 General Physics I Laboratory           | 1   |  |    |
| or PHY2016 Physics I Laboratory                |     |  |    |
| PHY1022 General Physics II                     | 3   |  |    |
| or PHY2022 Physics II                          | 1   |  |    |
| PHY1026 General Physics II Laboratory          | 1   |  |    |
| or PHY2026 Physics II Laboratory               | _   |  |    |
| Free Electives                                 | 1   |  |    |
| Free Electives                                 |     |  |    |
| Free Elective                                  | 3   |  |    |
| Free Elective                                  | 3   |  |    |
| Free Elective                                  | 3   | PHCY 715 Protein Function                        | 2  |
| Free Electives                                 | 3   | PHCY 716 Information Metabolism: Nucleic Acids   | 2  |
| Tree Electives                                 | 3   | and Cellular Communication                       |    |
|  |     | PHCY 717 Carbohydrate, Lipid and Amino Acid      | 2  |
| Free Electives                                 | 3   | Metabolism                                       |    |
|  |     | PHCY 734 Pharmacochemistry of the Immune System  | 3  |
| Applied Experiential Learning                  |     |  |    |
| ACCIATION C. II. C.A. A. C. C. T. A. I.        |     | PHCY 730 Pharmacochemistry of the Autonomic      | 2  |
| ASCI4799 College of Arts & Sciences Internship | 6   | Nervous System                                   |    |
|  | 1   | PHCY 732 Pharmacochemistry                       | •  |
|  |     | of Drugs with Actions on Smooth Muscle Systems   | 2  |
|  |     | PHCY 733 Pharmacotherapy of the Endocrine System | 2  |
| <b>Total Semester Credits</b>                  | 123 | <b>Total Transferable Semester Credits</b>       | 21 |

Students from **Johnson & Wales University** who complete a B.**S. Degree** in **Biology** according to the course matchup in the table above will be required to complete the following additional courses at **University of Saint Joseph** to receive their **DOCTOR OF PHARMACY: PHARM D.** 

| DOCTOR OF PHARMACY: PHARM D. Courses                       | Sem.<br>Hrs. |
|--|--------------|
| Additional First Professional Year (P1) Required Courses   |              |
| PHCY 700 Introduction to Health Care and Population Health | 3            |
| PHCY 703 Introduction to Self-care Therapeutics            | 1            |
| PHCY 706 Communication Skills                              | 1            |
| PHCY 710 Introduction to Pharmacochemistry                 | 2            |
| PHCY 720 Pharmacy Administration                           | 3            |
| PHCY 721 Pharmacoeconomics                                 | 2            |
| PHCY 722 Biostatistics and Literature Evaluation           | 2            |
| PHCY 724 Drug Information and Literature Evaluation        | 2            |
| PHCY 728 Pharmacy Law                                      | 2            |
| PHCY 735 Pharmochemistry of Anti-infective Drugs           | 3            |
| PHCY 736 Pharmacochemistry of the Antineoplastic Agents    | 2            |

| DHCV 727 DI 1 '4 - C4 C 4 1N C-4  |               |
|---|---------------|
| PHCY 737 Pharmacochemistry of the Central Nervous System                          | 2             |
| PHCY 745 Herbal Products and Dietary Supplements PHCY 750 Pharmaceutics           | 2             |
|   | 4             |
| PHCY 751 Pharmacokinetics and Biopharmaceutics                                    | 4             |
| PHCY 752 Pharmaceutical Sciences Laboratory                                       | 1             |
| PHCY 753 Pharmaceutical Care Lab  | 1             |
| PHCY 758 Immunization Certification Course  | 1             |
| PHCY 761 Introductory Pharmacy Practice Experience 1                              | 1             |
| PHCY 762 Introductory Pharmacy Practice Experience 2                              | 1             |
| PHCY 763 Introductory Pharmacy Practice Experience 3                              | 4             |
| PHCY 795 First Year Integrative Experience  | 2             |
| Second Professional Year (P2) Required Courses                                    | <u> </u>      |
| PHCY 803 Advanced Self-care Therapeutics  | 2             |
| PHCY 804 Writing in Pharmacy Practice, 1  | 1             |
| PHCY 806 Writing in Pharmacy Practice, 2  | 1             |
| PHCY 807 Practice Integration I   | 2             |
| PHCY 809 Practice Integration II  | 2             |
| PHCY 810 Clinical Toxicology  | 2             |
| PHCY 814 Patient Assessment   | 3             |
| PHCY 828 Pharmacotherapy of Infectious Diseases, Part I                           | 2             |
| PHCY 830 Pharmacotherapy of Renal Disorders                                       | 2             |
| PHCY 832 Pharmacotherapy of the Endocrine System                                  | 2             |
| PHCY 833 Pharmacotherapy of Immunologic and Autoimmune Disorders                  | 1             |
| PHCY 834 Pharmacotherapy of Common Respiratory Disorders                          | 2             |
| PHCY 835 Pharmacotherapy of GI & Liver Disorders                                  | 3             |
| PHCY 837 Pharmacotherapy of Hematologic and Oncologic Disorders                   | 3             |
| PHCY 838 Pharmacotherapy of Psychiatric Disorders                                 | 2             |
| PHCY 839 Pharmacotherapy of Neurologic Disorders                                  | 2             |
| PHCY 840 Pharmacotherapy of Selected Populations: Geriatrics                      | 2             |
| PHCY 842 Pharmacotherapy of Selected Populations: Pediatrics                      | 2             |
| PHCY 843 Pharmacotherapy of Common Dermatologic Conditions                        | 2             |
| PHCY 844 Pharmacotherapy of Infectious Diseases 2                                 | 2             |
| PHCY 845 Pharmacotherapy of Infectious Diseases 3                                 | 2             |
| PHCY 846 Pharmacotherapy of the Cardiovascular System 1                           | 2             |
| PHCY 847 Pharmacotherapy of the Cardiovascular System 2                           | 2             |
| PHCY 856 Pharmacotherapy of Selected Populations: Women's and Men's Health        | 2             |
| PHCY 861 Introductory Pharmacy Practice Experience 4                              | <u>-</u><br>1 |
| PHCY 862 Introductory Pharmacy Practice Experience 5                              | 1             |
| PHCY 895 Second Year Integrative Experience                                       | 2             |
| Electives   | 4             |
| Third Professional Year (P3) Required Courses                                     |               |
| PHCY 901 Advanced Pharmacy Practice Experience in Ambulatory Care                 | 6             |
| PHCY 902 Advanced Pharmacy Practice Experience in Acute Care                      | 6             |
| PHCY 903 Advanced Pharmacy Practice Experience in Community Practice              |               |
| PHCY 904 Advanced Pharmacy Practice Experience in Advanced Institutional Practice | 6             |
| PHCY 995 Third Year Integrative Experience  | 2             |
| Electives   | 12            |
| Literation 190  | 12            |
|   |               |
| Total Semester Hours Remaining  | 140           |
|   | L             |