

Faculty Senate Proposal for

Bachelor of Science in Health Science-Master of Science in Physician Assistant Studies

Articulation Agreement

Submitted January 2013

Approved by Bachelor of Science in Health Science Faculty

Prepared in Consultation with NAMS and SOBL

## **I. Introduction**

February 2012, Stockton entered into an Agreement with Philadelphia University and the Reliance Medical Group (BSHS-MSPA). The Agreement (Appendix A) is for Stockton to provide the undergraduate component of a five (5) year plan of study leading to Bachelor of Science in Health Science (BSHS) and Master of Science in Physician Assistant Studies (MSPA) degrees. Stockton's existing BSHS program would comprise the first three (3) years of study, the fourth year of study would combine BSHS and MSPA study, and the final year of study would be solely MSPA. Philadelphia University has an accredited MSPA Program located in Philadelphia. The plan is for Philadelphia University to have a satellite campus to be located in Atlantic City, New Jersey.

Currently, New Jersey has two (2) accredited Physician Assistant (PA) programs (The University of Medicine and Dentistry of New Jersey and Seton Hall University). Both of these programs are located in the northern part of the State. In comparison, New York has 21 accredited PA programs and Pennsylvania has 16 programs. The demand for PA education is high. The Centralized Application Service for Physician Assistants (CASPA) reports that in the 2009-2010 admissions cycle there were 3.04 applications for every available seat in CASPA-affiliated programs, and that the total number of applications submitted to CASPA increased by 16% from the 2009-2010 to the 2010-2011 cycle (CASPA, 2010).

May 2012, Philadelphia University submitted an application to the State of New Jersey Secretary of Higher Education for initial licensure of the MSPA. Specifically, the application is for Philadelphia University to offer a MSPA in partnership with Stockton and Reliance Medical Group. The application decision is pending.

This proposal has been reviewed and approved January 2013 by the faculty of the BSHS Program.

## **II. Curriculum**

Stockton has a long history of establishing articulation agreements, such as the Pharmacology Dual Degree Program between Biology/Biochemistry and Rutgers University. The BSHS-MSPA is similar whereby students will be accepted from high school, complete prerequisite courses at Stockton as partial fulfillment of a baccalaureate degree, and transfer to a partner school for their graduate, professional education.

There are prerequisite courses for admission into the MSPA. Table 1 lists the Stockton courses that would fulfill the MSPA prerequisite course requirements.

Table 1: Philadelphia University Prerequisite Courses for MSPA and Stockton Course Equivalents

Philadelphia University MSPA Requirements	Stockton Course Equivalents	Stockton Course Title
Biology I with lab	BIOL 1200/ 1205	Cells and Molecules with lab
Biology II with lab or Genetics	BIOL 1400/ 1405	Biodiversity with lab
Chemistry I with lab	CHEM 2110 and 2115	Chemistry I: General Principles with lab
Chemistry II or Organic Chemistry with lab	CHEM 2140 and 2145	Chemistry II: Organic Structures with lab
Anatomy and Physiology I or Anatomy with lab	HLTH 2170 or BIOL 2180/2185	Human Anatomy and Physiology or Human Anatomy with lab
Anatomy and Physiology II or Physiology with lab	HLTH 2280 or BIOL 2150/2151	Human Anatomy and Physiology II or Principles of Physiology with lab
Microbiology with lab	BIOL 3020	Microbiology for Health Sciences with lab
Writing or English Composition	HLTH 1411 or alternate W1 course	Writing and Editing for Health Science or alternate W1 course
College-level Mathematics or Statistics	HLTH 2305 or alternate	Statistics for Health Professionals or alternate
Introduction to Psychology or General Psychology	PSYC 1100	Introduction to Psychology

Appendix B shows a sample curriculum leading to the BSHS degree. Note that during year five (5), students are enrolled in the MSPA Program and the BSHS faculty members have identified the following 10-credits of the MSPA curriculum that can be applied to the BSHS degree:

PASF407-A	Advanced Anatomy A	2 cr.
PASF407-B	Advanced Anatomy B	3 cr.
PASF410	Medical&Professional Ethics	2 cr.
PASF413	Med.Physiology&Pathophys	3 cr.

To meet the specialized needs of students in this area of study, **a BSHS-PA track is recommended**. This track would be open to any student interested in PA, not just those students accepted into the BSHS-MSPA course of study with Philadelphia University.

### III. Projected Enrollment

Per the Agreement with Philadelphia University and Reliance Medical Group,

The maximal number of students admitted into the Philadelphia University MS in PA Studies NJ Program entering from the Combined 5-Year BSHS/MS will be no more than 50% of the entering graduate class in any given year. Entering class size is determined by Philadelphia University with the approval Accreditation

Review Commission on Education for the Physician Assistant (ARC-PA).

It is anticipated that Philadelphia University will receive approval to offer the MSPA in New Jersey during the 2012-2013 or 2013-2014 academic year. Therefore, the first group of freshman would likely be admitted to the BSHS-MSPA Fall 2014. Philadelphia University enrollment projections and BSHS-PA enrollments are as described in Table 2.

Table 2: Maximum Number of Students Accepted Annually for BSHS and MSPA

Year (Fall)	Maximum Accepted Annually for BSHS at Stockton	Maximum Accepted Annually by MSHA at Phil U
2014	12	24
2015	14	28
2016	18	35
2017	19	37
2018	20	40*

\*Expected Maximum Size of MSHA Cohort for Philadelphia University NJ satellite

**III. Impact and Resources**

BSHS-PA enrollment has the potential to impact select Stockton programs and the impact must be considered. By fall 2018, there would be a maximum of 20 students/year enrolled in the BSHS-MSPA. Note that the original Agreement (Appendix A), included a mechanism for students to be accepted during their freshman year at Stockton. To best manage enrollment, the Agreement has been amended to only permit admission to BSHS-PA directly from high school (see Appendix C Stockton-Philadelphia Agreement Letter January 2013). To further manage enrollment, we plan to be transparent about the following: 1) the number of students accepted by Stockton each year 2) all students will be accepted directly from high school 3) there will be no preference given to Stockton students or New Jersey residents for direct admissions into the MSHA

**Impact on the BSHS Program in SHS**

BSHS is a new and fast growing program at Stockton. The Program began fall 2012 with >300 students and had 378 students enrolled by the first week of spring semester 2013. Resources are being provided for the unexpected popularity of this program. The BSHS currently has 3 full-time FTE and 3.8 adjunct FTE for a total of 6.8 FTE. A 5-year projection of total BSHS-MSHA enrollment is described in Table 3. The need for additional resources is being monitored, including the need for additional full-time faculty lines.

Table 3: Maximum Stockton Student Enrollment for BSHS-MSPA

CLASS	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Freshman	12	14	18	19	20	20	20
Sophomore		12	14	18	19	20	20
Junior			12	14	18	19	20
Maximum Stockton Enrollment for BSHS-MSPA	12	26	44	51	57	59	60
Maximum Stockton Enrollment for BSHS-MSPA with 10% attrition	11	23	40	46	51	53	54

By fall 2020, there will be a maximum of 20 students/class and 3 levels of classes for a maximum total of 60 students. These students will be enrolled in the BSHS-PA Track as well as other Stockton students who wish to be part of this track.

The BSHS Program Coordinator position cannot meet the needs of the additional students. Per the Agreement with Philadelphia University, the BSHS-MSPA students will have special admissions and advising needs including but not limited to the following:

- a rigorous initial admissions process with interviews and a final admissions process.
- annual progress reviews and reports for each student
- annual monitoring of overall and science GPA
- recruitment planning
- coordinating efforts to have students register for prerequisite courses
- assistance with achieving 200 hours of paid or volunteer health care experience
- assist with Emergency Medical Technician Certification or Nursing Assistant Certification
- advise students to take GRE in timely manner
- identify opportunities in the physician assistant profession
- final certification of each qualified student.

Beginning spring 2014 (assuming a fall 2014 start for the BSHS-MSPA), a **Track Coordinator with 4 teaching credits of release time per year** will be required to meet the terms of the Agreement and to assist additional students at Stockton who wish to be part of the BSHS-PA track. The track coordinator would begin one semester prior to students arriving at Stockton to prepare admissions procedures, policies and procedures, assist with web information and recruitment, and additional responsibilities as deemed necessary. All of these responsibilities for 54-60 students by 2021 support the need for a track coordinator. It is assumed that the track Coordinator position will be similar to other Track Coordinators as described in the Agreement.

A positive impact of the Agreement is that Philadelphia University plans to equip a one-person simulator laboratory to be housed in the School of Health Science (cost >\$85,000). Philadelphia University agrees

to permit the other programs in the School to use the laboratory. A simulator laboratory would meet a growing need in the School.

**The Agreement is for a maximum of 20 students/class by 2018. Resources at Stockton would be a driving force in our annual decision to accept the maximum number of students; that number could be reduced if resources are not available.**

#### **Impact on Biology and Chemistry Programs in NAMS**

The prerequisite science courses will translate into each BSHS-MSPA student enrolling in 3-5 biology lecture and laboratory courses and 2 chemistry program lecture and laboratory courses. A maximum enrollment of 20 students/class by 2018 could translate into 1 additional laboratory section for each prerequisite science course. Dean Weiss is aware of the potential impact upon the Programs in NAMS and is working with those Programs and Interim Dean Kathrins to review enrollment trends and resources.

#### **Impact on Psychology Program in SOBL**

Dean Kaus does not anticipate that the addition of  $\leq 20$  students/year by 2018 into the required Introduction to Psychology course would have a significant impact upon the Psychology Program.

#### **References**

Centralized Application Service for Physician Assistants. (2010). *CASPA Cycle 9 Report, October 2010*. Retrieved from <http://www.paeaonline.org/index.php?ht=a/GetDocumentAction/i/114398>

**APPENDIX A**

**Agreement\***

**Attached pdf file**

**\*Note that there are no Appendices or Exhibits available for this Agreement though they are referenced in the body of the text.**

**APPENDIX B**

**Sample Curriculum Leading to the**

**Bachelor of Science in Health Science**

**and**

**Master of Science in Physician Assistant Studies**



Richard Stockton College of New Jersey  
 Bachelor of Science in Health Sciences  
 Sample Course Progression for Students Conditionally Accepted  
 into the BSHS/MSPA five year combined program

Freshman Year	Fall		Spring		
BIOL 1200	Cells & Molecules	4 cr.	BIOL 1400	Biodiversity & Evolution	4 cr.
BIOL 1205	Cells & Molecules lab	1 cr.	BIOL 1405	Biodiversity & Evolution lab	1 cr.
CHEM 2110	Chemistry I: General Principles	4 cr.	CHEM 2120	Chemistry II: Organic	4 cr.
CHEM 2115	Chemistry I Lab	1 cr.	CHEM 2125	Chemistry II: Organic lab	1 cr.
HLTH 1101	Introduction to the Health Sciences I	4 cr.	HLTH 1102	Intro. to Health Sciences II	4 cr.
G* or ASD	(Freshman Seminar)	4 cr.	G* or ASD	(student's choice)	4 cr.
<b>Total Credit Hours</b>		<b>18 cr</b>			<b>18 cr</b>

Summer (could be taken summer after Sophomore Year)		
G* or ASD	(student's choice)	4 cr.
G* or ASD	(student's choice)	4 cr.
<b>Total Credit Hours</b>		<b>8 cr</b>

Sophomore Year	Fall		Spring		
G* or ASD	(student's choice)	4 cr.	HLTH 2301	Cultural DiversityHS	4 cr.
BIOL 2180	Human Anatomy	4 cr.	BIOL 2150	Vertebrate Physiology	4 cr.
BIOL 2185	Human Anatomy lab	0 cr.	BIOL 2151	Vertebrate Physiology	0 cr.
OR			OR		
HLTH 2170	Anatomy and Physiology I	4 cr.	HLTH 2270	Anatomy and Physiology II	4 cr.
	A&P Hybrid Lab I	1 cr.		A&P Hybrid Lab II	1 cr.
G* or ASD	(student's choice)	4 cr.	G* or ASD	(student's choice)	4 cr.
PSYC 1100	Introduction to Psychology	4 cr.	HLTH 1411	Writing and Editing W1	4 cr.
<b>Total Credit Hours</b>		<b>17 cr</b>			<b>17 cr</b>

Junior Year	Fall		Spring		
BIOL 3020	Microbio for Hlth Sciences	4 cr.	G* or ASD	(student's choice)	4 cr.
HLTH 3421	Medical Terminology	4 cr.	HLTH 3200	Research for the HS W2/Q2	4 cr.
HLTH 2411	Informatics for the Health Prof	4 cr.	G* or ASD	(student's choice)	4 cr.
G* or ASD	(student's choice)	4 cr.	G* or ASD	(student's choice)	4 cr.
G* or ASD	(student's choice)	4 cr.	HLTH 2305	Statistics	4 cr.
<b>Total Credit Hours</b>		<b>20 cr</b>			<b>20 cr</b>

**\*Students can take both HLTH 2170 Anatomy and Physiology I with Hybrid Lab (4 credits) AND HLTH 2270 Anatomy and Physiology II with Hybrid Lab (4 credits) as a substitute for the following courses: BIOL 2180, 2185, 2159, and 2151. Partial substitutes will not be accepted. (i.e. HLTH 2170 and BIOL 2180 and 2185.**

**NOTE: COMPLETION OF THE ABOVE SEQUENCE OF COURSES DOES NOT GUARANTEE CONTINUATION INTO THE MSPA COMPONENT OF THE 3/2 BSHS/MSPA. ACCEPTANCE IS CONTINGENT UPON STUDENTS MEETING THE REQUIREMENTS IN THE ADMISSIONS CONTRACT.**

**GENERAL EDUCATION REQUIREMENTS FOR STOCKTON**

**General Education Requirements\***

Arts course \_\_\_\_\_

International/Multicultural course \_\_\_\_\_

Values/Ethics course \_\_\_\_\_

Historical Consciousness course \_\_\_\_\_

**Writing Requirement: (all courses must have 'C' or better grades)**

1. W1 course (Frosh): \_\_\_\_\_

2. Other W1 or W2 course: \_\_\_\_\_

3. Other W1 or W2 course: \_\_\_\_\_

4. 3000/4999 level W1 or W2 course: \_\_\_\_\_

**Quantitative Reasoning Requirement**

1. Q1 course: \_\_\_\_\_ 2. Q2 course: \_\_\_\_\_ 3. Q1 or Q2 course: \_\_\_\_\_

**Reminder: "The student is responsible for insuring that all graduation requirements are met (Bulletin)." It is important that you consult with your preceptor and/or the Center for Academic Advising on a regular basis throughout the year, not just at the time of registration.**

**THE COMBINED 3/2 BSHS/MSPA PROGRAM**  
**Senior Year BSHS/Year 1 MSPA and Year 2 MSPA\***

SUMMER

<b>Senior Year</b>	<b>Summer1</b>			
<b>PASF407-A</b>	<b>Advanced Anatomy A</b>	<b>2 cr.</b>		

**MSPA YEAR 1 (Senior Year as Undergraduate)**

<b>Senior/ Year 1</b>	<b>Fall</b>		<b>Senior/Year2</b>	<b>Spring</b>	
<b>PASF407-B</b>	<b>Advanced Anatomy B</b>	<b>3 cr.</b>	<b>PAS611</b>	<b>Clinical Medicine</b>	<b>8 cr.</b>
<b>PASF410</b>	<b>Medical&amp;Professional Ethics</b>	<b>2 cr.</b>	<b>PAS612</b>	<b>Clinical Reasoning</b>	<b>2 cr.</b>
<b>PASF411</b>	<b>Applied Behavioral Science</b>	<b>3 cr.</b>	<b>PAS613</b>	<b>Pharmacology&amp;Pharmacoth</b>	<b>4 cr.</b>
<b>PASF413</b>	<b>Med. Physiology&amp;Pathophys</b>	<b>3 cr.</b>	<b>PAS614</b>	<b>Emergency Medicine</b>	<b>3 cr.</b>
<b>PASF417</b>	<b>Medical History&amp;phys diagnos</b>	<b>5 cr.</b>	<b>PAS615</b>	<b>Laboratory Medicine</b>	<b>2 cr</b>
<b>PASF421</b>	<b>Med Genetics, Immun&amp;Micro</b>	<b>2 cr.</b>			
<b>Total Credit Hours</b>		<b>22 cr</b>			<b>27 cr</b>

SUMMER

<b>Year 1</b>	<b>Summer</b>	
<b>PAS 621</b>	<b>Clinical Disciplines Overview</b>	<b>6 cr.</b>
<b>PAS 622</b>	<b>Pharmacotherapeutics Seminar</b>	<b>1 cr.</b>
<b>PAS 623</b>	<b>Advanced Radiology/ECG Sem</b>	<b>1 cr.</b>
<b>PAS 624</b>	<b>Biomedical Literature&amp;Reserch</b>	<b>3 cr.</b>
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr.</b>

**Total Credit Hours**

**17 cr**

**Year 1 Credit Hours 68 (Year 1 also includes the senior year for Stockton)**

**MSPA YEAR 2**

<b>Year 2</b>	<b>Fall</b>		<b>Year 2</b>	<b>Spring</b>	
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>	<b>PAS 7XX</b>	<b>Clinical rotate/Preceptrship</b>	<b>6 cr</b>
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>	<b>PAS 7XX</b>	<b>Clinical rotate/Preceptrship</b>	<b>6 cr</b>
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>	<b>PAS 7XX</b>	<b>Clinical rotate/Preceptrship</b>	<b>6 cr</b>
<b>Total Credit Hours</b>		<b>18 cr</b>			<b>18 cr</b>

<b>Year 2</b>	<b>Summer</b>	
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>
<b>PAS 7XX</b>	<b>Clinical Rotate/Preceptorship</b>	<b>6 cr</b>
<b>PAS 771</b>	<b>Clinical Rotate/Preceptorship</b>	<b>3 cr</b>

**Total Credit Hours**

**21 cr**

**Year 2 Credit Hours 57**

NOTE: The order of rotations and preceptorships (which ones they take in the fall, spring and summers) is different for each student; thus the 7XX. A list of rotations and preceptorships may be found below

\*Students will register for a 0 credit Stockton course each semester of the MSA Program.

**Rotations & Preceptorships**

*Clinical Rotations*

- PAS741 Internal Medicine Rotation
- PAS742 Pediatrics Rotation
- PAS743 Women's Health Rotation
- PAS744 Psychiatry/ Mental Health Rotation
- PAS745 Surgery Rotation
- PAS746 Emergency Medicine Rotation

*Clinical Preceptorships*

- PAS759 Preceptorship IA: Primary Care 1
- PAS760 Preceptorship IB: Primary Care 2
- PAS763 Preceptorship IIA: Floating Medicine Block
- PAS764 Preceptorship IIB: Elective

**APPENDIX C**

Stockton-Philadelphia University

Agreement Letter January 2013

Attached pdf file