DUAL-DEGREE BS IN HEALTH SCIENCE/MHS PHYSICIAN ASSISTANT (ELMPA)

Program Contact: Laurie Seeger (laurie.seeger@quinnipiac.edu) 203-582-3882

This entry-level dual-degree Physician Assistant (ELMPA) program leading to a Bachelor of Health Science Studies and Master of Health Science is divided into a 4-year preprofessional component and a 27-month professional component. To progress to the professional phase, all ELMPA courses and program requirements must be completed within four years.

The preprofessional component provides students with a well-rounded education and a strong focus in biological and health science studies. This very structured and organized undergraduate program not only prepares students for the rigors of the professional component of the program, but also introduces students to the role and responsibilities of physician assistants as well as the six competencies for the physician assistant profession. The program addresses the need for medical experience by providing students with emergency medical technician (EMT) training (PY 388 /PY 389) as well as extensive time shadowing practicing physician assistants (PY 397). EMT ride time and preclinical experiences take place at off-campus sites, and students are responsible for transportation to and from all off-campus sites beginning in the sophomore year. In addition, students must meet specific program health and immunization requirements for participation in the preclinical experiences. Program costs associated with the preclinical affiliations and EMT course, including uniform, parking, certification exam, health requirements documentation, background check and additional program fees, are the responsibility of the student.

Undergraduate portion of the dual-degree (ELMPA) minimum required credits 122

Course First Year	Title	Credits
Fall Semester		
BIO 101 & 101L	General Biology I and General Biology I Lab (UC Natural Science with Lab)	4
EN 101	Introduction to Academic Reading and Writing (UC First Year Writing)	3
MA 141	Calculus of a Single Variable (UC Math)	3
CHE 110 & 110L	General Chemistry I and General Chemistry I Lab	4
FYS 101	First-Year Seminar (UC Foundations Inquiry)	3
	Credits	17
Spring Semes	eter	
BIO 102 & 102L	General Biology II and General Biology Lab II	4
EN 102	Academic Writing and Research (UC First Year Writing)	3
UC Disciplina	ry Inquiry(Fine Arts, Humanities, Social Science	3
CHE 111 & 111L	General Chemistry II and General Chemistry II Lab	4

PY 104	Physician Assistant Seminar I - Orientation to the Profession	1
	Credits	15
Summer Sem	ester	
Patient Conta	ct Hours	
	Credits	0
Second Year		
Fall Semester		
BIO 211	Human Anatomy and Physiology I	4
& 211L	and Human Anatomy and Physiology Lab I	
CHE 210	Organic Chemistry I	4
& 210L	and Organic Chemistry I Lab	
PHY 110	General Physics I	4
& 110L	and General Physics I Lab	
PY 388 & 388I	Clinical Training I and Clinical Training I Lab ¹	3
W OOOL	Credits	15
Spring Semes		
BIO 212	Human Anatomy and Physiology II	4
& 212L	and Human Anatomy and Physiology II Lab	_
CHE 211	Organic Chemistry II	4
& 211L	and Organic Chemistry II Lab	
PY 397	Pre-Health Professions Clinical Affiliation	3
PY 389	Clinical Training II	3
& 389L	and Clinical Training II Lab ¹	
HSC 202	Medical Terminology	2
	Credits	16
Summer Sem	ester	
Patient Conta		
	ct Hours Credits	0
Third Year	Credits	0
Third Year Fall Semester	Credits	_
Third Year Fall Semester BMS 370	Credits General Microbiology	0
Third Year Fall Semester BMS 370 & 370L	Credits General Microbiology and General Microbiology Lab	4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core	General Microbiology and General Microbiology Lab e science elective	4 3-4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar	Credits General Microbiology and General Microbiology Lab	4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences)	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social	4 3-4 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences)	General Microbiology and General Microbiology Lab e science elective	4 3-4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social	4 3-4 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences)	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social	3-4 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences)	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social	3-4 3 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social	3-4 3 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human	3-4 3 3 16-17
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging	3-4 3 3 3 16-17
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304 BIO/BMS Core	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging Biological Chemistry	3-4 3 3 16-17 3
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304 BIO/BMS Core BIO/BMS/HSG	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging Biological Chemistry e science elective	4 3-4 3 3 16-17 3 3-4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304 BIO/BMS Core BIO/BMS/HSG	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging Biological Chemistry e science elective C Science elective	3-4 3 3 16-17 3 3 3-4 3-4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304 BIO/BMS Core BIO/BMS/HSG	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging Biological Chemistry e science elective C Science elective riquiry 1 (Fine Arts, Humanities, Social Sciences) Credits	3-4 3 3 16-17 3 3-4 3-4 3-4
Third Year Fall Semester BMS 370 & 370L BIO/BMS Core UC Disciplinar Sciences) UC Disciplinar Sciences) Open Elective Spring Semes BMS 200 BMS 304 BIO/BMS Core BIO/BMS/HSG UC Personal In	General Microbiology and General Microbiology Lab e science elective ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social ry Inquiry (Fine Arts, Humanities, Social Credits ter Biomedical Basis and Experience of Human Aging Biological Chemistry e science elective C Science elective requiry 1 (Fine Arts, Humanities, Social Sciences) Credits ester	3-4 3 3 16-17 3 3-4 3-4 3-4

Fourth Year Fall Semester PY 401 Introduction to Clinical Problem Solving 3 BIO/BMS Core science elective 3-4 UC Personal Inquiry 1 (Fine Arts, Humanities, Social Sciences) 3 UC Personal Inquiry 2 (Fine Arts, Humanities, Social Sciences) 3 **Open Electives** 1-3 Credits 13-16 **Spring Semester** PY 204 Physician Assistant Seminar II - The Interdisciplinary Team Histology and Lab **BMS 332** BIO/BMS/HSC Science elective 3-4 UC Personal Inquiry 2 (Fine Arts, Humanities, Social Sciences) 3 SHS 420 Integrative Capstone 3 PY 411 Introduction to PA Skills 1 Credits 15-16 **Total Credits** 122-129

Total number of credits required for completion of the preprofessional component = 122

Students who have earned advanced placement credit or other college credit in an introductory-level science course must still take BIO 101/BIO 102 and CHE 110/CHE 111 at Quinnipiac. Students with AP credits in non-science courses may elect to take only 14 credits in the fall semester of the first year.

Acceptable Core Science Electives

Code	Title	Credits
Select three o	f the following courses:	
BMS 310	Neuroanatomy	3
BMS 318	Pathophysiology	3
BMS 320	Pharmacology	3
BMS 325	Toxicology	3
BMS 330	Endocrinology	3
BMS 372 & 372L	Pathogenic Microbiology and Pathogenic Microbiology Lab	4
BMS 375 & 375L	Immunology and Immunology Lab	4
BIO 350	Cardiovascular Physiology	3

Additional Science Electives

Code	Title	Credits
Select two con from the follow	urses from core science electives OR wing:	
BIO 282 & 282L	Genetics and Genetics Lab	4
or BIO 471	Molecular Genetics	
BIO 298	Research Methods in Biology	3
BIO 317 & 317L	Developmental Biology and Developmental Biology Lab	4

BMS 318	Pathophysiology	3
BIO 328 & 328L	Human Clinical Parasitology and Human Clinical Parasitology Lab	4
BIO 329	Neurobiology	3
BIO 346 & 346L	Cell Physiology and Cell Physiology Lab	4
BIO 365	Cancer Biology	3
BIO 382 & 382L	Human Genetics and Human Genetics Lab	4
BMS 276	Drug Development	3
BMS 378	Vaccines and Vaccine-Preventable Diseases	3
BMS 470	Virology	4
BMS 473	Infections of Leisure	3
or BMS 47	'4Power of Plagues	
BMS 475	Special Topics in Microbiology	1-4
BMS 482	Independent Study in Microbiology	1-4
BMS 498	Independent Study in Biomedical Sciences I ¹	1-4
BMS 499	Independent Study in Biomedical Sciences II ¹	1-4
BMS 525	Vaccines and Vaccine Preventable Diseases ¹	3
BMS 556	Seminar in Health Care Disparities	1
BMS 595	Transplantation Immunology ¹	3
HSC 220	Health Care Essentials: Structure, Policy and Professionalism	3
HSC 225	Writing in the Health Professions	3
HSC 262	Nutrition in Health and Illness	3
HSC 270	Pillars of Public Health: Saving the World on a Population Level	3
HSC 315	Bioethical Issues in the 21st Century	3
HSC 498	Independent Study in Health Sciences ¹	1-4

With permission. Students who complete an independent study course for 2 credits must also complete a 4-credit science elective course in order to have at least 6 credits of science electives.

Acceptable UC Social Sciences (Disciplinary Inquiry/Personal Inquiry 1)

Code	Title	Credits
PS 101	Introduction to Psychology	3
PS 210	Human Sexuality	3
PS 232	The Concept of Personality and Its Development	3
PS 244	Psychology of Prejudice	3
PS 261	Social Psychology	3
PS 262	Psychology of Women and Gender	3
PS 272	Psychopathology	3
PS 284	LGBTQ Identities and Communities	3

If student has current EMT licensure on admission to the program, two additional science electives are taken instead of PY 388 and PY 389.

SO 101 Introduction to Sociology
SO 280 Sociology of Health and Illness

Acceptable UC Elective(Personal Inquiry 2)

CodeTitleCreditsBMS 200Biomedical Basis and Experience of3

Student Learning Outcomes

Human Aging

Upon completion of the Entry-Level Master's Physician Assistant program, students will demonstrate the following competencies:

Goal: Students will have a strong foundation in sciences and the healthcare system preparing them for the rigors of the graduate PA program.

- 1. Core Science Knowledge: Demonstrate a knowledge of core sciences.
- Interprofessional Health Care: Understand the roles and shared values of various healthcare professionals.

Goal: Students will become advocates of professional responsibility.

- Professionalism: Demonstrate the attributes of a high-quality professional.
- Interpersonal and Communication Skills: Possess the ability to safely and effectively communicate with various populations.
- 3. **Community Service**: Engage all students in active and ongoing community outreach.
- Leadership: Support a culture of leadership in the university and the community.

Program Requirements

Formal evaluation of the pre-physician assistant student by the Academic Progression and Retention Committee takes place at the end of the spring semester of the first year. To continue in the program, students must have a minimum cumulative GPA of 3.20 and a minimum cumulative science GPA of 3.20. Following the initial evaluation, students are evaluated after completion of each semester. Failure to maintain a minimum cumulative GPA of 3.20 and a minimum cumulative science GPA of 3.20 results in dismissal from the program. In addition, a 3.20 minimum GPA (both cumulative and science) is required for participation in preclinical affiliations. All required courses must be completed with a course grade of C or better.

By February 1 of the fourth year, students are required to have accumulated at least 1,000 hours of documented direct patient contact through paid and/or volunteer experiences (e.g., certified nurse's aide, medical assistant, phlebotomy technician, emergency room technician, EMT), 12 hours of Interprofessional Education and 60 hours of Community Service. While patient contact hours must be preapproved by program faculty, students are responsible for making their own arrangements to obtain these direct patient contact hours. In addition, all students are required to obtain student membership in the American Academy of Physician Assistants (AAPA).

Requirements for Progression to the MHS Physician Assistant Program

For a student in the Entry-Level Master's Physician Assistant (ELMPA) program to progress to the MHS Physician Assistant program at Quinnipiac University, the student must successfully complete all requirements to obtain a BS degree in Health Science Studies, including all prerequisite courses for the PA program admission, the CASPER test and a formative interview. Students progressing to the professional phase of the program may not have any course failures or grades of incomplete, and no outstanding academic integrity or professionalism issues at the time of progression. In addition, students must meet the established requirements for direct patient contact hours, EMT certification, Interprofessional Education, Community Service and Leadership hours. Prior to beginning the Physician Assistant program, students meet with a faculty member from the Department of Physician Assistant Studies for a final academic review. The student must meet all academic, curricular, professional, health and immunization, background check and technical standards requirements of the PA program to matriculate into the program.

For information on the professional component of the Entry-Level Master's Physician Assistant program, please see the Graduate Studies section (http://catalog.qu.edu/graduate-studies/health-sciences/physician-assistant-mhs/).

PY 104. Physician Assistant Seminar I - Orientation to the Profession.

1 Credit.

This course is for ELMPA majors only. Students gain a basic knowledge of the fundamentals of the physician assistant profession and are introduced to the competencies of the PA profession. PA education, role expectations and practice settings are examined. In addition, historical information on the profession is presented. Students must have active AAPA student membership.

Prerequisites: None Offered: Every year, Spring

PY 204. Physician Assistant Seminar II - The Interdisciplinary Team. 1 Credit.

In this seminar course, students explore the roles of those professionals who are part of the health care team and learn how team practice affects patient care. Experts from a variety of health care fields explore the relationship of the practicing PA in each professional domain.

Prerequisites: Take PY 104, PY 397.

Offered: Every year, Spring

PY 388. Clinical Training I. 3 Credits.

This course is for ELMPA majors only. It includes classroom and clinical experiences and provides students with an opportunity to develop the knowledge and skills required for Emergency Medical Technician National Certification. Emphasis is placed on patient assessment, clinical signs and symptoms, pathophysiology and the practical skills necessary to manage the pre-hospital care of patients. Clinical rotations with an ambulance service are required. At the discretion of the course instructor, students may be required to meet for additional practical sessions outside of class time. Successful completion of the PY 388-389 sequence and fulfillment of state-mandated hours of instruction are required to be eligible for certification.

Prerequisites: Take PY 104. **Offered:** Every year, Fall

PY 388L. Clinical Training I Lab.

0 Credits.

Lab to accompany PY 388. (3 lab hrs.)

Prerequisites: None **Offered:** Every year, Fall

PY 389. Clinical Training II.

3 Credits.

This course is a continuation of PY 388 and is for ELMPA majors only.

Prerequisites: Take PY 388. **Offered:** Every year, Spring

PY 389L. Clinical Training II Lab.

0 Credits.

Lab to accompany PY 389. (3 lab hrs.)

Prerequisites: None **Offered:** Every year, Spring

PY 397. Pre-Health Professions Clinical Affiliation.

3 Credits.

The pre-clinical experience pairs an undergraduate student who displays maturity, dedication and sensitivity with a physician assistant for a 12-week period. The affiliation is designed to provide the student with the opportunity to observe PA practice and the competencies of the PA profession in a clinical setting. Students may register for the course according to the following criteria: permission of faculty; completion of a minimum of three semesters at Quinnipiac; satisfactory GPA; compliance with pre-clinical health and uniform requirements.

Prerequisites: Take PY 104. **Offered:** Every year, Spring

PY 401. Introduction to Clinical Problem Solving.

3 Credits.

This course offers the pre-physician assistant student the tools necessary for developing a systematic approach to the patient and his or her medical condition. Students learn to access and evaluate the medical literature for identification of the signs and symptoms of disease presentation, the components of a history and physical, and the understanding of a differential diagnosis. In addition, students are taught the basis for developing a patient assessment plan. Students may not receive credit for both PY 401 and HSC 401.

Prerequisites: Take PY 104, PY 397.

Offered: Every year, Fall

PY 411. Introduction to PA Skills.

1 Credit.

This one credit course explores introductory skills for the Physician Assistant student through lecture, group projects, simulation and handson experience.

Prerequisites: Take PY 401 **Offered:** Every year, Spring