

# DUAL-DEGREE BS IN HEALTH SCIENCE STUDIES/MHS PHYSICIAN ASSISTANT

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This entry-level dual-degree Physician Assistant 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.

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/PY 400). 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.

## Entry-Level Master's Physician Assistant Curriculum

| Course   | Title   | Credits |
|--|---|---------|
| <b>First Year</b>  |   |         |
| <b>Fall Semester</b>   |   |         |
| BIO 101 & 101L   | General Biology I and General Biology I Lab       | 4       |
| EN 101   | Introduction to Academic Reading and Writing      | 3       |
| MA 141   | Calculus of a Single Variable                     | 3       |
| CHE 110 & 110L   | General Chemistry I and General Chemistry I Lab   | 4       |
| FYS 101  | First-Year Seminar                                | 3       |
| Credits  |   | 17      |
| <b>Spring Semester</b>   |   |         |
| BIO 102 & 102L   | General Biology II and General Biology Lab II     | 4       |
| EN 102   | Academic Writing and Research                     | 3       |
| UC Disciplinary Inquiry (Fine Arts, Humanities, Social Sciences) |   | 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    |
| <b>Summer Semester</b>   |   |       |
| Patient Contact Hours  |   |       |
| Credits  |   | 0     |
| <b>Second Year</b>   |   |       |
| <b>Fall Semester</b>   |   |       |
| BIO 211 & 211L   | Human Anatomy and Physiology I and Human Anatomy and Physiology Lab I   | 4     |
| CHE 210 & 210L   | Organic Chemistry I and Organic Chemistry I Lab                         | 4     |
| PHY 110 & 110L   | General Physics I and General Physics I Lab                             | 4     |
| PY 388 & 388L  | Clinical Training I and Clinical Training I Lab <sup>1</sup>            | 3     |
| Credits  |   | 15    |
| <b>Spring Semester</b>   |   |       |
| BIO 212 & 212L   | Human Anatomy and Physiology II and Human Anatomy and Physiology II Lab | 4     |
| CHE 211 & 211L   | Organic Chemistry II and Organic Chemistry II Lab                       | 4     |
| PY 397   | Pre-Health Professions Clinical Affiliation                             | 3     |
| PY 389 & 389L  | Clinical Training II and Clinical Training II Lab <sup>1</sup>          | 3     |
| HSC 202  | Medical Terminology   | 2     |
| Credits  |   | 16    |
| <b>Summer Semester</b>   |   |       |
| Patient Contact Hours  |   |       |
| Credits  |   | 0     |
| <b>Third Year</b>  |   |       |
| <b>Fall Semester</b>   |   |       |
| BMS 318  | Pathophysiology   | 3     |
| BMS 370 & 370L   | General Microbiology and General Microbiology Lab                       | 4     |
| BIO/BMS Core science elective                                    |   | 3-4   |
| UC Disciplinary Inquiry (Fine Arts, Humanities, Social Sciences) |   | 3     |
| UC Disciplinary Inquiry (Fine Arts, Humanities, Social Sciences) |   | 3     |
| Credits  |   | 16-17 |
| <b>Spring Semester</b>   |   |       |
| BMS 200  | Biology and Experience of Human Aging                                   | 3     |
| CHE 315 & 315L   | Biochemistry I and Biochemistry Lab I <sup>2</sup>                      | 4     |
| BIO/BMS Core science elective                                    |   | 3-4   |
| BIO/BMS/HSC Science elective                                     |   | 3-4   |
| UC Personal Inquiry 1 (Fine Arts, Humanities, Social Sciences)   |   | 3     |
| Credits  |   | 16-18 |
| <b>Summer Semester</b>   |   |       |
| Patient Contact Hours  |   |       |
| Credits  |   | 0     |

**Fourth Year****Fall Semester**

|  |  |       |
|--|--|-------|
| PY 400   | Pre-Physician Assistant Clerkship        | 3     |
| 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     |
| Credits  |  | 15-16 |

**Spring Semester**

|  |   |         |
|--|---|---------|
| PY 204   | Physician Assistant Seminar II - The Interdisciplinary Team | 1       |
| BMS 332  | Histology   | 4       |
| BIO/BMS/HSC Science elective                                   |   | 3-4     |
| UC Personal Inquiry 2 (Fine Arts, Humanities, Social Sciences) |   | 3       |
| QU 420   | Integrative Capstone  | 3       |
| Credits  |   | 14-15   |
| Total Credits  |   | 124-129 |

<sup>1</sup> If student has current EMT licensure on admission to the program, two additional science electives are taken instead of PY 388 and PY 389.

<sup>2</sup> CHE 315L (Biochemistry Lab) is optional. Students who are pursuing a minor in chemistry are required to complete CHE 315L.

Total number of credits required for completion of the preprofessional component = 123

Students who have earned advanced placement credit or other college credit in an introductory-level science course are encouraged to still take BIO 101/BIO 102 and CHE 110/CHE 111 at Quinnipiac. Students opting out of those courses are required to take the equivalent number of hours at a higher level in the same area of course work. Students with AP credits in nonscience 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 of the following courses: |   |         |
| BMS 310                                | Neuroanatomy  | 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                           | 3-4     |
|  | or HSC 375 Immunology                                   |         |
| BIO 350                                | Cardiovascular Physiology                               | 3       |

**Additional Science Electives**

| Code  | Title                         | Credits |
|---|-------------------------------|---------|
| Select two courses from core science electives OR from the following: |                               |         |
| BIO 282 & 282L  | Genetics and Genetics Lab     | 4       |
|   | or BIO 471 Molecular Genetics |         |

|                |  |     |
|----------------|--|-----|
| BIO 298        | Research Methods in Biology                                      | 3   |
|                | or BMS 278 Research and Technology                               |     |
| BIO 317 & 317L | Developmental Biology and Developmental Biology Lab              | 4   |
| 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 474 Power of Plagues                                      |     |
| BMS 475        | Special Topics in Microbiology                                   | 4   |
| BMS 482        | Independent Study in Microbiology <sup>1</sup>                   | 2-4 |
| BMS 498        | Independent Study in Biomedical Sciences I <sup>1</sup>          | 2-4 |
| BMS 499        | Independent Study in Biomedical Sciences II <sup>1</sup>         | 2-4 |
| BMS 525        | Vaccines and Vaccine Preventable Diseases <sup>1</sup>           | 3   |
| BMS 595        | Transplantation Immunology <sup>1</sup>                          | 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 322        | Health Care Law (LE 322)   | 3   |
| HSC 498        | Independent Study in Health Sciences                             |     |
| HSC 499        | Independent Study in Health Sciences II                          | 2-4 |

<sup>1</sup> 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 232 | The Concept of Personality and Its Development | 3       |
| PS 261 | Social Psychology                              | 3       |
| PS 262 | Psychology of Women (WS 262)                   | 3       |
| PS 272 | Abnormal Psychology                            | 3       |

|        |                           |   |
|--------|---------------------------|---|
| SO 101 | Introduction to Sociology | 3 |
| SO 280 | Illness and Disability    | 3 |

### Acceptable UC Elective (Personal Inquiry 2)

| Code    | Title                                 | Credits |
|---------|---------------------------------------|---------|
| BMS 200 | Biology and Experience of Human Aging | 3       |

## 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 3.2 and a minimum cumulative science GPA of 3.2. Following the initial evaluation, students are evaluated after completion of each semester. Failure to maintain a minimum cumulative GPA of 3.2 and a minimum cumulative science GPA of 3.2 results in dismissal from the program. In addition, a 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). 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. 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 and EMT certification. 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.

**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 on 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.)

**Offered:** Every year, Fall

### PY 389. Clinical Training II. 3 Credits.

This course is a continuation of PY 388.

**Prerequisites:** Take PY 388.

**Offered:** Every year, Spring

### PY 389L. Clinical Training II Lab. 0 Credits.

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

**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 400. Pre-Physician Assistant Clerkship. 3 Credits.

Pre-physician assistant students participate in a mentoring program that provides the opportunity to gain knowledge through direct observation. Each student spends time with three physician assistants who specialize in different areas of medicine.

**Prerequisites:** Take PY 104 PY 397.

**Offered:** Every year, Fall

**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