

Health & Pre-Professional Science - Certificate (HPPS.CERT)

The Health & Pre-Professional Science Certificate is designed to introduce students to core scientific and healthcare concepts, terminology, and career pathways within both clinical and laboratory-based environments. This flexible, stackable certificate serves as an ideal starting point for students preparing to enter health-related associate degree programs, transfer to four-year institutions, or pursue short-term credentials for direct workforce entry.

Students may follow one of two distinct but complementary pathways:

• Pre-Professional Science Track – Designed for students intending to transfer into bachelor's programs in fields such as pre-medical, pre-veterinary, pre-dental, pharmacy, optometry, physical and occupational therapy, and physician assistant studies. This track fulfills many first-year academic requirements for science majors and provides the foundational coursework needed for successful transfer.

• Health Science Foundation Track – Intended for students exploring entry-level healthcare careers or preparing for selective health programs such as Diagnostic Imaging, Respiratory Care, Surgical Technology, and Medical Assisting. This track emphasizes early exposure to healthcare systems, hands-on skills, and foundational general education coursework.

• Embedded credential options—such as Phlebotomy Technician, EKG Technician, Emergency Medical Technician-Basic, and Medical First Responder—enable students to earn industry-recognized certifications while advancing toward a degree. The certificate supports both short-term employment and long-term academic mobility, helping students meet selective program prerequisites while building a competitive edge in the healthcare ecosystem.

Minimum credits: 16 Minimum cumulative GPA: 2.0 Minimum grade in all courses: 2.0

Choose from Track A or Track B (16 Credits)

Track A: Pre-Professional Science (Transfer-Focused)

This track is designed for students planning to transfer to a four-year institution to pursue a degree in either as science majors or as pre-professional students. The coursework provides foundational preparation in science and general education and fulfills many first-year academic requirements for transfer into pre-professional programs.

Students must complete a minimum of 16 credits from the following areas:

MATHEMATICS (choose one)

- MAT 133 Probability and Statistics
- MAT 139 College Algebra
- MAT 141 Pre-Calculus

MAT 151 Calculus I OR MAT 152 Calculus II

SCIENCE CORE COURSES (choose three-four)

- BIO 132 Human Biology
- BIO 161 General Biology I
- BIO 162 General Biology II
- BIO 220 Microbiology
- BIO 253 Human Anatomy and Physiology I
- BIO 254 Human Anatomy and Physiology II
- CEM 131 Fundamentals of Chemistry
- CEM 132 Fundamentals of Organic and Biological Chemistry
- CEM 141 General Chemistry I
- CEM 142 General Chemistry II
- CEM 241 Organic Chemistry I
- CEM 242 Organic Chemistry II
- PHY 231 College Physics I OR PHY 251 Modern University Physics I
- PHY 232 College Physics II **OR** PHY 252 Modern University Physics II

PRE-PHYSICIAN ASSISTANT COURSE

PPA 101 Intro to Pre-Physician Assistant

Track B : Health Science Foundation (Applied/Stackable Credential-Focused)

This track is designed for students seeking short-term credentials and foundational exposure to healthcare systems while preparing for entry-level healthcare careers or selective admission to associate degree programs. It emphasizes career exploration, hands-on skills, and the opportunity to earn embedded certifications in high demand allied health roles.

GENERAL EDUCATION (7 – 8 credits)

Choose from the following:

- BIO 132 Human Biology
- BIO 253 Human Anatomy & Physiology I AND BIO 254 Human Anatomy & Physiology II
- COM 250 Intercultural Communications
- ENG 131 Writing Experience I
- ENG 132 Writing Experience II
- HUM 131 Cultural Connections
- MAT 130 Quantitative Reasoning or higher
- PSY 130 General Psychology **OR** PSY 152 Social Psychology

HEALTH SCIENCE CORE (8 - 9 credits)

Select courses to meet or exceed the 9-credit minimum. Courses with asterisks lead to stackable credentials

- BIO 220 Microbiology
- CEM 131 Fundamentals of Chemistry
- DMS 100 Introduction to Diagnostic Imaging
- DMS 104 Introduction to Sonographic Instrumentation
- EMS 116 Medical First Responder *

- EMS 124 Emergency Medical Technician-Basic *
- HOC 110 Advanced First Aid and CPR
- HOC 130 Introduction to Health Occupations
- HOC 135 EKG Technician *
- HOC 145 Phlebotomy Technician *
- MOA 112 Medical Law and Ethics
- MOA 120 Medical Terminology
- NRS 145 Normal/Therapeutic Nutrition
- PHL 236 Ethics
- PHY 145 General Physics
- PPA 101 Intro to Pre-Physician Assistant
- RES 101 Introduction to Respiratory Care
- SUR 101 Introduction to Surgical Technology

(Courses marked with an asterisk may lead to a stackable credential)