

# Respiratory Care Technology

**Description:** This curriculum prepares students as advanced practitioners in respiratory care technology. Students learn diagnostic and therapeutic procedures applicable to pulmonary care. Therapeutic procedures include use and administration of oxygen and other medical gases, aerosolization of drugs for inhalation, set up and maintenance of mechanical ventilators (to assist or control ventilation), performance of chest physical therapy maneuvers and certification in cardiopulmonary resuscitation. Respiratory care personnel perform diagnostic procedures such as pulmonary function studies and arterial blood gas analysis, and are involved in rehabilitation of the patient with cardiopulmonary abnormalities. The Respiratory Care Technology program is a 22-consecutive-month associate's degree program that is fully accredited by the Commission on Accreditation for Respiratory Care. The program's graduates are eligible to sit for all credentialing examinations administered by the National Board for Respiratory Care, including the entry-level examination, the written registry and clinical simulation examinations and specialty exams in pulmonary function technology and neonatal/pediatric respiratory care. In addition, graduates are eligible for Pennsylvania state licensure, a requirement for practicing in the state, and licensure in all states. Students will also become student members of the American Association for Respiratory Care.

In addition to classroom and laboratory program components, clinical experience at selected area hospitals and health care facilities is required. The clinical phase requires the student to be in the hospital approximately eight hours per day, up to five days per week, starting as early as 7 a.m. As a prerequisite to the clinical phase of the program, students must provide evidence of personal medical insurance, certification in all CPR techniques and the results of complete physical examination. Laboratory test results will include a complete blood count, serology and urinalysis. A **QuantiFERON-TB Gold or T-SPOT TB test is also required**, and, if indicated, a chest X-ray may be necessary. **Students must also get an annual flu shot. In addition, proof of immunization from measles, mumps, rubella, polio, and varicella is required. The T-dap and Hepatitis B shots are required for students who cannot demonstrate immunity.** A second complete physical exam is required prior to beginning the second year of the program. Health problems that might interfere with the ability to meet stated program objectives will be considered on an individual basis.

## **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- **Demonstrate knowledge and skills needed to successfully pass the NBRC licensing exam for CRT.**
- **Provide age-specific treatment, management, and care of patients with any type of cardiopulmonary problem.**
- **Assess and modify the treatment of patients to give quality care in the Respiratory medical setting.**
- **Demonstrate competent and safe use of all equipment used in the Respiratory medical setting.**

**Program Entry Requirements:** To apply to the program, applicants must have a diploma from an accredited high school or a state equivalency diploma.

**Applicants must also fulfill the following requirements:**

- Required knowledge and competency in anatomy and physiology as demonstrated by having taken and passed a four-credit, college-level Anatomy and Physiology I course (such as BIOL 109) with a grade of C or better. The course must have been taken within the past 5 years.
- Placement in FNMT 118: Intermediate Algebra or higher placement
- Placement in ENGL 101: English Composition I
- GPA of 3.0 or higher
- Attainment of sufficient skills in reading, writing and mathematics as demonstrated by performance on the Kaplan Health Care Test.

Applicants are strongly encouraged to complete all required biology and chemistry courses, BIOL 110, CHEM 110 or CHEM 101, and BIOL 241, before entering the program. If students complete required biology and chemistry courses prior to program entry, the courses must be completed within the last ten years in order to count toward graduation.

Applicants will be admitted only upon favorable recommendation of the Respiratory Care Technology faculty. Admission is considered conditional until all health and background information is received and reviewed.

Applicants must be at least 18 years of age at the start of the clinical experience.

**Readmission:** Students petitioning for a second admission to the program must have a 2.75 grade point average and will be readmitted only upon favorable recommendation of the entire faculty.

**Clinical Experience Requirements:** Clinical experience in the program includes contact with children. Acceptance to the program is conditional pending receipt and evaluation of a criminal background check and child abuse clearance check. Completed checks must be received by the program director by August 15, prior to the fall semester of the first year of the program. The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

**Child Abuse Clearance:**

Any record results in denial of admission into the Respiratory Care program.

**Criminal Background Checks:**

- Any felony conviction within the past 10 years results in denial of admission to the Respiratory Care program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense and any explanatory letters/materials submitted by the applicant or student.

- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense and explanatory letter/materials submitted by the applicant or student. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

Note: The State has the final decision when granting a license.

**Reconsideration:** An applicant who believes that an error of fact has been made in terms of the information provided to the decision-making committee can request reconsideration by the committee. This request must be made in writing within 10 days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision-making committee, the applicant can appeal the committee's decision to the Vice President for Academic and Student Success whose decision is final.

**Progression:** To remain in the Respiratory Care program students must maintain a grade of "C" or better in all Respiratory Care and required pre- and co-requisite courses. During all clinical laboratory experiences, the student must maintain client safety and receive a passing grade for any clinical component of a course. Failure to do so will result in either a failure in the course or administrative or student-initiated withdrawal.

Students whose attitudes and behaviors appear inconsistent with professional standards may not be admitted or may be dropped from the program at any time, pending the results of a departmental hearing.

**Program of Study and Graduation Requirements:** To qualify for the Associate in Applied Science (A.A.S.) degree as a respiratory care practitioner, a student must complete 70 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

**For Reference:** The Pennsylvania State Board of Medicine and the Pennsylvania State Board of Osteopathic Medicine reserves the right to deny certification to any candidate who has been convicted of a felonious act. Conviction includes a judgment, an admission of guilt or a plea of nolo contendere, probation without verdict, or incomplete ARD. Further, the board shall not issue a license to any applicant who has been:

1. convicted of a felonious act prohibited by the act of April 14, 1972 (P.L. 233, No. 64) known as The Controlled Substance, Drug, Device and Cosmetic Act; or
2. convicted of a felony relating to a controlled substance in a court of law of the United States or any other state, territory or country unless:
  - at least 10 years have elapsed from the date of the conviction;
  - the applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations; and
  - the applicant otherwise satisfies the qualifications contained in this act.

Involvement in any incident which resulted in disciplinary action against a student at Community College of Philadelphia or any post-secondary institution is considered in the admissions process.

The Respiratory Care Technology program reserves the right to deny admission to any applicant who has a documented history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

**Course Sequence (no change)**

## Courses and Completion Sequence

The following courses and sequence of courses is designed for the optimal success and completion of the Respiratory Care Technology degree/certificate. Any alterations should be discussed with your academic advisor.

### Semester 1

Course Number and Name	Credits	Advisory Notes
<u>RESP 100 - Introduction to Respiratory Care Technologies</u>	4 credits	RESP 100 is a prerequisite for <u>RESP 102</u> . Must earn a grade of "C" or better. Only offered in the fall semester. Must be taken concurrently with RESP 101. Required to receive a grade of "C" or better to register for spring semester. Students are assigned to perform clinical competency check-offs throughout the semester that monitors their success.
<u>RESP 101 - Respiratory Care Techniques</u>	4 credits	RESP 101 is a prerequisite for <u>RESP 102</u> . Must earn a grade of "C" or better. Only offered in the fall semester. Must be taken concurrently with RESP 100. Required to receive a grade of "C" or better to register for spring semester. Students are assigned to perform clinical competency check-offs throughout the semester that monitors their success. Prerequisites: RESP 100 with a grade of "C" or better, must be taken concurrently
<u>ENGL 101 - English Composition I</u>	3 credit	Prerequisite for <u>ENGL 102</u> . Required to receive a grade of "C" or better to register for ENGL 102
<u>BIOL 110 - Anat &amp; Phys II</u>	4 credit	Must receive a grade of "C" or better Completion of <u>BIOL 109</u> with a grade of "C" or better.
<u>FNMT 118 - Intermediate Algebra</u>	3 credit	

This is a select program. Students must have completed BIOL 109 with a grade of "C" or better before beginning the program.

A GPA of 3.0 or higher is required to continue in the program.

### Semester 2

Course Number and Name	Credits	Advisory Notes
<u>RESP 102 - Respiratory Pharmacology, Modalities, and Airway Management</u>	4 credits	Prerequisite for <u>RESP 103</u> . Must earn a grade of "C" or better. Only offered in the spring semester. Prerequisites: <u>RESP 100</u> and <u>RESP 101</u> with grade of "C" or better. Required to receive a grade of "C" or better to register for summer semester. Students are assigned to perform clinical competency check-offs throughout the semester that monitors their success
<u>CIS 103 - Applied Computer Technology</u>	3 credits	Students must earn a grade of "C" or better demonstrating they have met minimum requirements of course.
<u>ENGL 102 - The Research Paper</u>	3 credit	Prerequisite of <u>ENGL 101</u> with a grade of "C" or better. Students should visit the English learning lab for support on writing assignments.

#### Summer 1

Course Number and Name	Credits	Advisory Notes
<u>CHEM 110 - Introductory Chemistry</u> or <u>CHEM 101 - General Chemistry I</u>	4 credits	Must receive a grade of "C" or better. Students must place into <u>FNMT 118</u> before taking <b>CHEM 110</b> .
<u>RESP 103 - Introduction to Cardiopulmonary Pathophysiology</u>	3 credits	Prerequisite for <u>RESP 104</u> . Must receive a grade of "C" or better. Only offered in the early summer session. Prerequisites: <u>RESP 102</u> with grade of "C" or better. Required to receive a grade of "C" or better to register for late summer semester. Students are assigned to perform clinical competency check-offs throughout the semester that monitors their success.

#### Summer 2

Course Number and Name	Credits	Advisory Notes
<u>RESP 104 - Clinical Practicum I</u>	3 credits	Prerequisite for <u>RESP 210</u> and <u>RESP 220</u> . Must receive a grade of "C" or better. Only offered in the late summer session.

Semester 3

Course Number and Name	Credits	Advisory Notes
<u>RESP 210 - Cardiopulmonary Pathophysiology I</u>	4 credits	Prerequisite for <u>RESP 211</u> and RESP 221. Must receive a grade of "C" or better. Only offered in the Fall semester Prerequisites: <u>RESP 104</u> with a grade of "C" or better; co-requisite: <u>RESP 220</u> (must be taken concurrently) Required to receive a grade of "C" or better to register for spring semester.
<u>RESP 220 - Advanced Respiratory Care</u>	5 credits	Must receive a grade of "C" or better. Only offered in the fall semester. Prerequisites: <u>RESP 104</u> ; co-requisite: <u>RESP 210</u> . Required to receive a grade of "C" or better to register for spring semester. Prerequisites: BIOL 241 with a grade of "C" or better, RESP 210 with a grade of "C" or better, RESP 211 which must be taken concurrently
<u>BIOL 241 - Principles of Microbiology</u>	4 credits	Must earn a grade of "C" or better in the course. Prerequisites: <u>BIOL 106</u> or <u>BIOL 107</u> ; <u>BIOL 109</u> or <u>BIOL 123</u> with a grade of "C" or better

Semester 4

Course Number and Name	Credits	Advisory Notes
<u>RESP 211 - Cardiopulmonary</u>	4 credits	Prerequisite for <u>RESP 299</u> . Must receive a grade of "C" or better. Only offered in the spring semester. Prerequisite: <u>RESP 210</u> with grade of "C" or better; co-requisite: <u>RESP 221</u> . Required to receive a grade of "C" or better to register for early summer semester.
<u>RESP 221 - Adult Critical Care</u>	6 credits	Prerequisite for <u>RESP 299</u> . Must earn a grade of "C" or better in the course. Only offered in the spring semester. Prerequisite: <u>RESP 210</u> with grade of "C" or better; co-requisite: <u>RESP 211</u> .

<b>Course Number and Name</b>	<b>Credits</b>	<b>Advisory Notes</b>
		Required to receive a grade of "C" or better to register for early summer semester.
<u>ENGL 115 - Public Speaking</u>	3 credits	Prerequisite: <u>ENGL 101</u> , which may be taken concurrently
<u>SOC 101 - Introduction to Sociology</u>	3 credits	Most transfer institutions require a sociology course.

Summer 1

<b>Course Number and Name</b>	<b>Credits</b>	<b>Advisory Notes</b>
<u>RESP 299 - : Advanced Respiratory Care Procedures III</u>	3 credits	Must earn a grade of "C" or better. Only offered in early summer session. Prerequisites: <u>RESP 211</u> and <u>RESP 221</u> with a grade of "C" or better.