

# Respiratory Therapy

**Program Description:** The Associate of Applied Science Transfer (AAS-T) in Respiratory Therapy program at Columbia Basin College equips students to excel in advanced roles within the rapidly evolving field of respiratory care. This program combines theoretical instruction with practical experiences in lecture, labs, and clinical settings, ensuring students develop proficiency in various aspects of respiratory therapy. Topics of study encompass respiratory health assessment, pulmonary function testing, ventilator management, patient education, and the latest advancements in respiratory care.

Following completion of prerequisite coursework and acceptance in the Respiratory Therapy program, the program spans six quarters (two instructional years). Upon successful completion of the program, graduates will be primed for roles in hospitals, clinics, rehabilitation centers, and other healthcare settings. They will also be eligible to apply for national board certification in Respiratory Therapy, once the program achieves CoARC accreditation.

**Program Outcomes:** Graduates of the AAS-T in Respiratory Therapy program at Columbia Basin College will be able to meet the following programmatic outcomes. These outcomes encapsulate the core competencies expected of respiratory therapists, ensuring that graduates not only have the technical knowledge and skills but also the holistic, ethical, and professional grounding necessary in this vital healthcare field.

1. **Clinical Competence:** Graduates will demonstrate advanced skills and practices essential to respiratory care, ensuring patient-centered, safe, and effective delivery of respiratory therapy in diverse healthcare settings.
2. **Critical Thinking and Problem Solving:** Graduates will utilize critical thinking and decision-making skills to accurately assess patients' respiratory care needs, interpret diagnostic results, and develop comprehensive care plans.
3. **Interprofessional Collaboration:** Graduates will exhibit effective communication and teamwork, working collaboratively within healthcare teams to provide coordinated patient care.
4. **Ethical and Professional Conduct:** Graduates will adhere to the highest standards of ethical and professional behavior in all aspects of respiratory therapy, ensuring the advocacy of patients' rights and well-being.
5. **Evidence-Based Practice:** Graduates will incorporate evidence-based practices and proficient data analysis into patient care, emphasizing safety, quality improvement, and ethical standards to ensure optimal patient outcomes in respiratory therapy.
6. **Cultural Competence and Patient Advocacy:** Graduates will provide culturally responsive care and actively advocate for the needs of diverse patient populations to ensure equitable respiratory care services.

## Respiratory Therapy Degrees and Certificates

### Respiratory Therapy Associate in Applied Science - Transfer (AAS-T) Degree 24-25

Respiratory Therapy Associate in Applied Science - Transfer (AAS-T) Degree 24-25

Transfer

# Major Courses

## Major Courses

Course Number	Title	Credits
RT 101	Fundamentals of Respiratory Care I [RE]	6
RT 111	Fundamentals of Respiratory Care I Lab [RE]	3
RT 102	Cardiopulmonary Anatomy & Physiology [RE]	3
RT 103	Electrocardiography [RE]	1
RT 113	Electrocardiography Lab [RE]	1
RT 104	Fundamentals of Respiratory Care II [RE]	5
RT 114	Fundamentals of Respiratory Care II Lab [RE]	3
RT 105	Respiratory Therapy Pharmacology [RE]	5
RT 106	Advanced Cardiovascular Life Support [RE]	1
RT 107	Fundamentals of Respiratory Care III [RE]	5
RT 117	Fundamentals of Respiratory Care III Lab [RE]	4
RT 108	Advanced Respiratory Pathophysiology [RE]	5
RT 201	Fundamentals of Respiratory Care IV [RE]	4
RT 211	Fundamentals of Respiratory Care IV Lab [RE]	2
RT 222	Respiratory Therapy Clinical I [RE]	8
RT 203	Fundamentals of Respiratory Care V [RE]	4
RT 213	Fundamentals of Respiratory Care V Lab [RE]	2
RT 224	Respiratory Therapy Clinical II [RE]	8
RT 205	Professional Credentialing Preparation [RE]	4
RT 215	Respiratory Therapy Capstone [RE]	3
RT 226	Respiratory Therapy Clinical III [RE]	8

# Major Support

## Major Support

Course Number	Title	Credits
BIOL& 241	Human A&P 1 W/ Lab [M/S]	5-6
BIOL& 242	Human A&P 2 W/ Lab [M/S]	5-6
BIOL& 260	Microbiology W/ Lab [M/S]	5-6

# General Education

## General Education

Course Number	Title	Credits
MATH& 146	Introduction to Stats [M/S] [Q/SR]	5
	<b>CMST&amp; 101, CMST&amp; 210, CMST&amp; 220, CMST 260</b>	<b>5</b>
	<b>ENGL&amp; 101, ENGL&amp; 102, ENGL&amp; 235</b>	<b>5</b>
	<b>PSYC&amp; 100 or PSYC&amp; 200</b>	<b>5</b>

- Required minimum cumulative GPA of 2.0 in all courses.

Total Credits Required

120-123

# Respiratory Therapy Courses

RT 101 : Fundamentals of Respiratory Care I [RE]

## RT 101: Fundamentals of Respiratory Care I [RE]

This course introduces the foundations of respiratory care, focusing on the role of respiratory therapists, basic cardiopulmonary anatomy and physiology, and introductory therapeutic and diagnostic procedures. Emphasis is placed on evidence-based practice and the principles of patient-centered care.

**Credits:** 6

**Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 102 : Cardiopulmonary Anatomy & Physiology [RE]

## RT 102: Cardiopulmonary Anatomy & Physiology [RE]

This course offers an in-depth study of the structure and function of the cardiopulmonary system. Topics include the respiratory and circulatory systems, gas exchange mechanisms, and the regulatory aspects of breathing and circulation.

**Credits:** 3

**Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 103 : Electrocardiography [RE]

## RT 103: Electrocardiography [RE]

An introduction to electrocardiography, this course covers the basics of ECG technique and interpretation. Students will learn to recognize normal and abnormal heart rhythms and understand their clinical significance.

**Credits:** 1

**Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 104 : Fundamentals of Respiratory Care II [RE]

## RT 104: Fundamentals of Respiratory Care II [RE]

Continuing from RT 101, this course delves into advanced respiratory care techniques, including mechanical ventilation, patient assessment, and management of acute respiratory conditions. Emphasis on integrating clinical decision-making with theoretical knowledge.

**Credits:** 5

**Prerequisite:** Completion of RT 101, RT 111, RT 102, RT 103, and RT 113 with a 2.0 grade or better.

RT 105 : Respiratory Therapy Pharmacology [RE]

## RT 105: Respiratory Therapy Pharmacology [RE]

This course explores pharmacological agents in respiratory care, including bronchodilators, corticosteroids, and anti-infectives. Emphasis on pharmacodynamics, dosing, side effects, and clinical application in respiratory disorders.

**Credits:** 5

**Prerequisite:** Completion of RT 101, RT 111, RT 102, RT 103, and RT 113 with a 2.0 grade or better.

RT 106 : Advanced Cardiovascular Life Support [RE]

## RT 106: Advanced Cardiovascular Life Support [RE]

An overview of advanced cardiovascular life support (ACLS), this course introduces students to the protocols and practices for managing cardiopulmonary emergencies, including algorithm-based patient care and teamwork.

**Credits:** 1

**Prerequisite:** Completion of RT 101, RT 111, RT 102, RT 103, and RT 113 with a 2.0 grade or better.

RT 107 : Fundamentals of Respiratory Care III [RE]

## RT 107: Fundamentals of Respiratory Care III [RE]

Building on previous courses, this class addresses complex respiratory care practices, focusing on critical care, advanced patient management strategies, and ethical considerations in respiratory therapy.

**Credits:** 5

**Prerequisite:** Completion of RT 104, RT 114, RT 105, and RT 106 with a 2.0 grade or better.

RT 108 : Advanced Respiratory Pathophysiology [RE]

## RT 108: Advanced Respiratory Pathophysiology [RE]

An in-depth exploration of respiratory pathophysiology, this course examines the underlying mechanisms and clinical manifestations of various pulmonary diseases, emphasizing their impact on respiratory function and patient care.

**Credits:** 5

**Prerequisite:** Completion of RT 104, RT 114, RT 105, and RT 106 with a 2.0 grade or better.

RT 111 : Fundamentals of Respiratory Care I Lab [RE]

## RT 111: Fundamentals of Respiratory Care I Lab [RE]

A practical laboratory complementing RT 101, this course provides hands-on experience with basic respiratory care equipment and procedures. Students will engage in simulations that reinforce theoretical concepts, focusing on proper equipment use and patient care techniques.

**Credits:** 3

**Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 113 : Electrocardiography Lab [RE]

## RT 113: Electrocardiography Lab [RE]

Complementing RT 103, this lab focuses on hands-on ECG acquisition and analysis. Students will practice correct lead placement, ECG interpretation, and troubleshooting common ECG acquisition problems.

**Credits:** 1

**Prerequisite:** Acceptance into CBC's Respiratory Therapy program.

RT 114 : Fundamentals of Respiratory Care II Lab [RE]

## RT 114: Fundamentals of Respiratory Care II Lab [RE]

A hands-on lab experience complementing RT 104. Focuses on advanced respiratory care procedures, mechanical ventilation setups, and patient management simulations, enhancing technical and decision-making skills.

**Credits:** 3

**Prerequisite:** Completion of RT 101, RT 111, RT 102, RT 103, and RT 113 with a 2.0 grade or better.

RT 117 : Fundamentals of Respiratory Care III Lab [RE]

## RT 117: Fundamentals of Respiratory Care III Lab [RE]

An advanced laboratory course that reinforces and expands on the concepts from RT 107. Students engage in simulated critical care scenarios, mastering advanced respiratory care techniques and patient management strategies.

**Credits:** 4

**Prerequisite:** Completion of RT 104, RT 114, RT 105, and RT 106 with a 2.0 grade or better.

RT 201 : Fundamentals of Respiratory Care IV [RE]

## RT 201: Fundamentals of Respiratory Care IV [RE]

This course focuses on specialized areas of respiratory care, including pediatric and neonatal care, advanced diagnostic techniques, and the latest trends in respiratory therapy.

**Credits:** 4

**Prerequisite:** Completion of RT 107, RT 117, and RT 108 with a 2.0 grade or better.

RT 203 : Fundamentals of Respiratory Care V [RE]

## RT 203: Fundamentals of Respiratory Care V [RE]

This advanced course covers comprehensive respiratory care in various clinical settings, including critical care, long-term care, and rehabilitation. Focus on patient assessment, advanced therapeutic techniques, and interprofessional collaboration.

**Credits:** 4

**Prerequisite:** Completion of RT 201, RT 211, and RT 222 with a 2.0 grade or better.

RT 205 : Professional Credentialing Preparation [RE]

## RT 205: Professional Credentialing Preparation [RE]

This course prepares students for professional credentialing exams in respiratory care. It includes comprehensive review sessions, practice exams, and strategies for successful test-taking, covering all major aspects of respiratory therapy.

**Credits:** 4

**Prerequisite:** Completion of RT 203, RT 213, and RT 224 with a 2.0 grade or better.

RT 211 : Fundamentals of Respiratory Care IV Lab [RE]

## RT 211: Fundamentals of Respiratory Care IV Lab [RE]

This lab course provides practical experience in specialties including pediatric and neonatal respiratory care techniques, along with advanced diagnostic procedures in respiratory therapy.

**Credits:** 2

**Prerequisite:** Completion of RT 107, RT 117, and RT 108 with a 2.0 grade or better.

RT 213 : Fundamentals of Respiratory Care V Lab [RE]

## RT 213: Fundamentals of Respiratory Care V Lab [RE]

This lab complements RT 203, offering hands-on experience with advanced respiratory care equipment and techniques in diverse clinical scenarios.

**Credits:** 2

**Prerequisite:** Completion of RT 201, RT 211, and RT 222 with a 2.0 grade or better.

RT 215 : Respiratory Therapy Capstone [RE]

## RT 215: Respiratory Therapy Capstone [RE]

Serving as the culmination of the respiratory therapy program, this course requires students to develop and complete a research project or clinical case study. The project demonstrates their mastery of respiratory care principles and their ability to apply knowledge to real-world situations.

**Credits:** 3

**Prerequisite:** Completion of RT 203, RT 213, and RT 224 with a 2.0 grade or better.

RT 222 : Respiratory Therapy Clinical I [RE]

## RT 222: Respiratory Therapy Clinical I [RE]

The first clinical practicum, offering immersive experience in real-world respiratory care settings. Emphasis on applying theoretical knowledge to patient care, diagnostic procedures, and therapeutic interventions.

**Credits:** 8

**Prerequisite:** Completion of RT 107, RT 117, and RT 108 with a 2.0 grade or better.

RT 224 : Respiratory Therapy Clinical II [RE]

## RT 224: Respiratory Therapy Clinical II [RE]

A continuation of the clinical series, this course provides advanced clinical experiences in respiratory care. Students will engage in patient management in diverse settings, focusing on critical care scenarios and advanced respiratory support techniques.

**Credits:** 8

**Prerequisite:** Completion of RT 201, RT 211, and RT 222 with a 2.0 grade or better.

RT 226 : Respiratory Therapy Clinical III [RE]

## RT 226: Respiratory Therapy Clinical III [RE]

The final clinical practicum in the series, this course offers students in-depth, hands-on experiences in specialized areas of respiratory care. Emphasis is on integrating all learned skills and knowledge in the management of complex respiratory cases in various clinical settings.

**Credits:** 8

**Prerequisite:** Completion of RT 203, RT 213, and RT 224 with a 2.0 grade or better.

RT 305 : Fundamentals of Respiratory Care III [RE]

## RT 305: Fundamentals of Respiratory Care III [RE]

Building on previous courses, this class addresses complex respiratory care practices, focusing on critical care, advanced patient management strategies, and ethical considerations in respiratory therapy.

**Credits:** 6

**Prerequisite:** Completion of RT 303, RT 313, and RT 304 with a grade of 2.0 or better.