**BACHELOR OF SCIENCE IN RESPIRATORY CARE**

Respiratory Care Program Director:
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Respiratory care is an allied health profession concerned with the diagnostic evaluation, treatment, and management of patients with cardiopulmonary disorders. The respiratory care practitioner (RCP) is proficient in:

- therapeutic administration of medical gases and aerosols
- intermittent and continuous mechanical ventilation
- broncho-pulmonary hygiene
- basic and advanced cardiac life support techniques
- non-invasive patient monitoring
- pulmonary function evaluation
- arterial blood gas analysis
- airway management procedures
- pulmonary rehabilitation techniques

A licensed RCP must also be knowledgeable regarding various assessment techniques and patient education models. These skills are used with neonatal, pediatric, and adult patients in acute, sub-acute, and home care settings. To function effectively as a member of the multidisciplinary health care team, the RCP must have a sound understanding of:

- the physiological, psychological, and cultural needs of the patient
- the role of the various therapeutic interventions in the patient care plan
- development of broad-based skills to more effectively contribute to the overall care of the patient

Theory and laboratory experiences are provided prior to the student’s entry into the clinical education phase of the program. This program can be completed in four calendar years. It includes three summer sessions. A sleep diagnostics course is also available. Please visit Respiratory Care (http://catalog.ysu.edu/undergraduate/colleges-programs/college-health-human-services/department-health-professions/bs-respiratory-care) for more information.

**Accreditation**

The Bachelor of Science in Respiratory Care (CoARC #200247) at Youngstown State University, Youngstown, Ohio is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com). To view CoARC Program outcomes please visit CoARC Outcomes Data (https://www.coarc.com/Students/Programmatic-Outcome-Data.aspx).

The goals of the Bachelor of Science in Respiratory Care are:

- To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).
- To prepare leaders for the field of respiratory care by including curricular content that includes objectives related to acquisition of skills one or more of the following: management, education, research, and advanced clinical practice (which may include an area of clinical specialization).

**Polysomnography Certificate is:**

- To prepare sleep disorder specialists with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of polysomnography practice as performed by sleep disorder specialists (SDS).

<table>
<thead>
<tr>
<th>COURSE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>BIOL 1545</td>
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<td>MATH 2623</td>
<td>Quantitative Reasoning</td>
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**General Education Requirements**

Core Competencies

- ENGL 1550 Writing 1
- or ENGL 1549 Writing 1 with Support
- ENGL 1551 Writing 2
- CMST 1545 Communication Foundations
- Mathematics requirement (met with MATH 2623)

Knowledge Domains

- Arts and Humanities (6 s.h.)
- PHIL 2625 Introduction to Professional Ethics (required for major)
- One additional Arts and Humanities course
- Natural Sciences (2 courses; 1 with lab) (6-7 s.h.)
- BIOL 1560 Microbiology for the Health Professions (required for major)
- BIOL 1560L Microbiology Laboratory for Health Professions (required for major)
- One additional Natural Science course (can be met with BIOL 1545/1545L or CHEM 1510/1510L)
- Social Science (6 s.h.)
- SOC 1500 Introduction to Sociology (required for major)
- PSYC 1560 General Psychology (required for major)
- Social and Personal Awareness (6 s.h.)
- PHLT 1568 Healthy Lifestyles
- or PHLT 1531 Fundamentals of Public Health
- One additional S &PA course
- HAHS 1500 Introduction to the Bitonte College of Health and Human Services (First Year Experience course)

**Respiratory Care Courses**

- RESC 1529 Respiratory Care Orientation
- RESC 1531 Respiratory Care Essentials
- MATC 2605 Introduction to Pharmacology
- RESC 1503 Respiratory Procedures 1
- RESC 1520 Respiratory Care Assessment 1
- PHYS 1506 Physics for Health Care
- AHLT 3705 Pharmacotherapeutics
- RESC 2620 Respiratory Assessment 2
- RESC 2621 Cardiopulmonary Disease
- RESC 3706 Respiratory Procedures 2
- RESC 3720 Mechanical Ventilation 1
- AHLT 4806 Research Methods
### Bachelor of Science Respiratory Care (BSRC) Curriculum

#### Year 1

**Fall**
- BIOL 1545 Allied Health Anatomy and Physiology 5
- MATC 1501 Medical Terminology 3
- MATH 2623 Quantitative Reasoning 3
- ENGL 1550 Writing 1 or ENGL 1549 Writing 1 with Support 3-4

Semester Hours 14-15

**Spring**
- CMST 1545 Communication Foundations 3
- CHEM 1510 Chemistry for the Allied Health Sciences 4
- CHEM 1510L Chemistry for the Allied Health Sciences Laboratory 0
- ENGL 1551 Writing 2 3
- SOC 1500 Introduction to Sociology 3
- PHLT 1568 Healthy Lifestyles or PHLT 1531 Fundamentals of Public Health 3
- HAH 1500 Introduction to the Bitonte College of Health and Human Services 2

Semester Hours 18

### Year 2

**Fall**
- RESC 1529 Respiratory Care Orientation 2
- RESC 1531 Respiratory Care Essentials 3
- MATC 2605 Introduction to Pharmacology 3
- BIOL 1560 Microbiology for the Health Professions 2
- MLT 2687L Microbiology for Health Care Laboratory 1
- PHIL 2625 Introduction to Professional Ethics 3

Semester Hours 14

**Spring**
- RESC 1503 Respiratory Procedures 1 4
- RESC 1520 Respiratory Care Assessment 1 3
- PSYC 1560 General Psychology 3
- AHLT 3705 Pharmacotherapeutics 3

Semester Hours 13

#### Summer
- RESC 2620 Respiratory Assessment 2 3
- RESC 2621 Cardiopulmonary Disease 4

Semester Hours 7

**Year 3**

**Fall**
- RESC 3706 Respiratory Procedures 2 3
- RESC 3720 Mechanical Ventilation 1 3
- AHLT 4806 Research Methods 3
- AHLT 5840 Comparative Health Systems 3

Semester Hours 12

**Spring**
- RESC 2699 Clinical Practice 1 1
- RESC 3708 Respiratory Clinical Specialties 3
- RESC 3709 Neonatal/Pediatric Respiratory Care 4
- RESC 3725 Mechanical Ventilation 2 3
- RESC 3731 Respiratory Care Management 3

Semester Hours 14

#### Summer
- RESC 3740 Clinical Practice 2 4
- RESC 3750 Pulmonary Rehabilitation 2

Semester Hours 6

**Year 4**

**Fall**
- RESC 3765 Advanced Respiratory Care Diagnostics 3
- RESC 3741 Clinical Practice 3 3
- RESC 4831 Pulmonary Care Management 3
- AHLT 4812 Advanced Cardiac Life Support 3
- RESC 4838 Respiratory Seminar 1 1
- RESC 4835 Clinical Practice 4 3
- RESC 4842 Respiratory Seminar 2 1
- AHLT 4820 Directed Research 3

Sleep Diagnostic Option
- RESC 4846 Sleep Diagnostics 1 3
- RESC 4847 Sleep Clinics 1 1
- RESC 4848 Sleep Diagnostics 2 3
- RESC 4849 Sleep Clinics 2 1

#### Spring
- RESC 4846 Sleep Diagnostics 1 (Optional) 1
- RESC 4847 Sleep Clinics 1 (Optional) 1

Semester Hours 17

**Spring**
- RESC 4835 Clinical Practice 4 3
- RESC 4842 Respiratory Seminar 2 1
- AHLT 4820 Directed Research 3
- Arts & Humanities Elective 3
- Social & Personal Awareness Elective 3
- RESC 4848 Sleep Diagnostics 2 (Optional) 1
- RESC 4849 Sleep Clinics 2 (Optional) 1

Semester Hours 17

Total Semester Hours 132-133

1. Sleep Diagnostics Option: The Sleep Diagnostics option is a restricted program. Current BSRC senior students are given preference to enroll in the certificate program. BSRC program GPA is the primary criteria used to select students for the Polysomnography Certificate. BSRC students who enroll in the Sleep Diagnostics option will complete 134 sh. Students who do not take the Sleep Diagnostics option will complete a total of 126 sh.

### Learning Outcomes

The student learning outcomes for the major in Respiratory Care are as follows:

- Knowledge of the respiratory care care in the context of the health care system
- Ability to apply respiratory care principles and procedures
- Ethical and professional behavior in the practice of respiratory care
- Critical thinking and problem-solving skills
- Communication skills in the practice of respiratory care
- Commitment to lifelong learning and professional development
- Ability to work cooperatively with other health care professionals
- Ability to provide safe, effective, and compassionate care to patients
- Understanding of the role of research in respiratory care practice
• Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as advanced-level respiratory therapists (cognitive domain).
• Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as advanced level respiratory therapists (psychomotor domain).
• Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as advanced-level respiratory therapists (affective domain).

The student learning outcomes for the Sleep Diagnostic Option in Respiratory Care are as follows:

• Upon completion of the program, graduates will demonstrate the ability to comprehend, apply, and evaluate clinical information relevant to their roles as sleep disorder specialists (cognitive domain).
• Upon completion of the program, graduates will demonstrate technical proficiency in all the skills necessary to fulfill their role as sleep disorder specialists (psychomotor domain).
• Upon completion of the program, graduates will demonstrate professional behavior consistent with employer expectations as sleep disorder specialists (affective domain).