

RESC 3765 - Advanced Respiratory Care Diagnostics

Fall 2026 Syllabus, Section A02, CRN 43266,

Credit hours: 3

Instructor

Heather O'Connell

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Public Instructor Information

Instructor Title: Dr. Heather O'Connell DHA, RRT, RRT-ACCS, CPFT

Instructor Professional Qualifications: Doctorate of Healthcare Administration- Walden University- 2022; Masters Healthcare Administration- Southern New Hampshire University- 2016; Bachelors of Science- Cardiopulmonary Sciences- University of Central Florida- 2008

Instructor Office Location: Cushwa Hall- 1110

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Course Description

3765. Advanced Respiratory Care Diagnostics. The study of the fundamentals of advanced respiratory care diagnostics. Three hour lecture. Prereq.: none. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Egan's Fundamentals of Respiratory Care - With Code 12TH	Robert M.	
Required	Comprehensive Respiratory Diseases,	Lintz and Karpel	

Content for this course also comes from a variety of resources included in the modules (power point presentations, WebEx video conferencing, journal articles, web-based videos, and web-based resources). I hope to provide you all with as much up to date information on the many topics we will be covering in this course.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
10/19	Review Powerpoints and Videos. Read required PDF's	Introduction to the course Review of SYllabus Review of Proctored Software Coronary Artery Disease and Acute Coronary SYndrome	Complete Quiz 2
10/26	Review PowerPoint and Videos	Cardiovascular Diagnostics Part 1: 12 lead EKGs, Stress Testing, Muga Scan, Echocardiogram, TEE, Holter Monitoring Cardiovascular Diagnostics Part Two: Intravascular Ultrasound, EP studies, PCI	Complete Quiz 3 and Quiz 4

11/2	Review PowerPoints and Video. Read VAD Article	Cardiovascular Invasive Procedures Part One: Invasive Heart Surgery Cardiovascular Invasive Procedures Part Two: Intra-Aortic Balloon Pump, Pacers and Implantable Defibrillators, Ventricular Assist Devices	Complete Quizzes 5 and 6
11/9	Review Powerpoints and Videos	Cardiovascular Invasive Procedures Part three: PICC Lines, IVC Filter, ECMO,	Complete Midterm Exam
11/16	Review PowerPoints, Videos, Supplemental Websites, and Respected pdf's	Pulmonary Diagnostics Part One: Respiratory Inductive Plethsmography, Polysomnography. Pulmonary Diagnostics Part Two: Indirect Calorimetry, FENO, Infant PFT's, Exercise laryngoscopy, FEES Pulmonary Diagnostics Part Three: THoracic Imaging	Complete Quiz 8
11/23	Read Supplemental Articles Read Chapter 22 and 27 in Egan View Videos Review Powerpoints	Pulmonary Invasive Procedures: Bronchial Thermoplasty, Airway Stenting, Balloon Dilation, Bronchoscopic Ablation, Pleuroscopy, Thoracentesis and Pleurodesis, PleurX Pleural catheter, Lung Volume Reduction, Diaphragmatic Pacing	Complete Discussion Post
11/30	Complete Final Exam	Comprehensive Modules 1, 2, 3, 4, 5, and 6	

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