



North Central State College

MASTER SYLLABUS

2026-2027

- A. Academic Division: Health Sciences
- B. Discipline: Respiratory Care
- C. Course Number and Title: RESP2410 Respiratory Care Equipment/Procedures IV
- D. Assistant Dean: Dr. Jason Tucker, Ph.D.
- E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 3 hours
- F. Prerequisites: RESP2310, RESP2390
Co-requisite(s): RESP2450, RESP2470, RESP2490
- G. Last Course/Curriculum Revision Date: Fall 2023 Origin date: 12/22/2010
- H. Textbook(s) Title:
Egan's Fundamentals of Respiratory Care
 - Authors: Kacmarek, Stoller, and Heuer
 - Copyright Year: 2024
 - Edition: 13th
 - ISBN #: 9780323931991
- I. Workbook(s) and/or Lab Manual: None
- J. Course Description: In this course, students will learn about advanced pulmonary function testing techniques and equipment, electrocardiograms, breathing exercises, pulmonary and cardiac exercise testing, bronchoscopy, polysomnography, indirect calorimetry, pulmonary rehabilitation, and home care.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	Report Paper on Pulmonary Rehabilitation Communication Written VALUE Rubric Week 12
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	Class presentations on Pulmonary Rehabilitation and Home Care, completed week 10 & 12 Information – Literacy VALUE Rubric
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Interpret the results of the following: a. Cardiology Testing: Electrocardiography, Holter Monitoring, Stress Testing b. Pulmonary Testing: Six Minute Walk Test, Metabolic Assessment, Stress Testing, Adult Sleep Studies c. Pulmonary Function Testing: Spirometry, Methacholine Challenge, Nitrogen Washout/Helium Dilution, Diffusion Study, Plethysmography, Pulmonary Function Test Quality Assurance	Procedure Check-offs weeks 2, 4, 6, & 14
2. Act as an Assistant to the Physician Performing Special Procedure including: a. Pulmonary Testing: Bronchoscopy Assisting, Metabolic Assessment, Stress Testing, Holter Monitoring b. Endotracheal Tube/Tracheostomy Care: Securing Artificial Airway, Tracheostomy Care, Cuff Management, Heat/Moisture Exchanger, Intubation, Extubation c. Cardiology Testing: Holter monitoring, Cardiac Stress Testing d.	Examination Week 8 lab check-off weeks 2, 4, 6, 8, 10, 12, 14, 16
3. Prescribe pulmonary rehabilitation and home care explain planned therapy and goals to patient in understandable terms to achieve optimal therapeutic outcome. Explain and assess patient and family need for disease management and smoking cessation. Summarize the Medicare laws pertaining to Home Care	Project portfolio, Rubric week 14 Examination week 8

Outcomes	Assessments – How it is met & When it is met
4. Perform procedures including: a. Cardiology Testing: Electrocardiography, Holter Monitoring, Cardia Stress Testing b. Endotracheal/Tracheostomy Care: Tracheostomy Care, Tracheal Suctioning c. Pulmonary Function Testing: Spirometry, Methacholine Challenge, Nitrogen Washout/Helium Dilution, Diffusion Study, Plethysmography, Pulmonary Function Test Quality Assurance	Laboratory Check-offs weeks 2, 4, 12 Examination week 8

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70–72	C-	1.67	Average
67–69	D+	1.33	Below Average
63–66	D	1.00	Below Average
60–62	D-	0.67	Below Average
00--59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the [syllabus supplement](#) located at

<http://catalog.ncstatecollege.edu/mime/download.pdf?catoid=5&ftype=2&foid=3>



North Central State College
SYLLABUS ADDENDUM

Academic Division:	Health Sciences	Discipline:	Respiratory Care
Course Coordinator:	Nychole Rose		
Course Number:	RESP 2410	Course Title:	Resp Care Equipment and Procedures
Semester / Session:	Fall 2026	Start / End Date:	8/17/2026-12/11/2026

Instructor Information

Name:	Nychole Rose	Credentials:	BS/RRT/RCP
Phone Number:	419-755-4825	E-Mail Address:	nrose@ncstatecollege.edu
Office Location:	HS-326	Office Hours:	Monday 8-12, 1:30-2:30

I. Topical Timeline / Course Calendar (Subject to Change):

Weeks	Topics Lecture/Lab	Assignment	Due Date
1	Introduction/ECG review/EKG Practice	Complete Workbook Chapter 18/ Practice Strips	8/24
2	ECG arrhythmia recognition, sterile procedure, arterial line sampling	ABG worksheet, Quiz 1/ Arterial line competency	
3	Tracheostomy care	Chapter 37 in workbook, Quiz 2/Trach competency	8/31
4	Breathing exercise techniques, 6-minute walk	Quiz 3/ six minute walk competency	
5	Bronchoscopy, finish trach care and breathing exercises	WB Chapter 22, and Bronch worksheet, Quiz 4/ Trach review and bronch competency	9/14
6	Sleep medicine, review bipap and cpap therapy	Chapter 34 and worksheet, Quiz 5/cpap setups and case studies	9/21
7	Continue Sleep, midterm review		
8	Midterm exam	Case studies lab	9/29
9	Respiratory care in alternative settings, home care	WB 55 and 57 /non invasive competency	10/12
10	Pulmonary rehabilitation	Presentations	10/20
11	Pulmonary Function	WB Ch 56 Quiz 6/NPPV competency	11/2
12	Continue pulmonary function,, advanced testing	WB Ch 20 /PFT lab	11/9
13	Continue PFT an alt care settings, skilled/long-term	PFT worksheet, case studies	11/16
14	Exercise and cardiopulmonary testing	Quiz 7	11/22
15	Semester Review	Review and Modified TMC Exam /Stress testing videos	12/1
16	Final Exam		12/8

II. Course Assignments:

1. Quizzes
2. Tests
3. Skills Testing
4. Independent Studies
5. Lecture/discussion
6. Lab demonstration and practice
7. Homework

II. Grading and Testing Guidelines:

Final Grade Calculation

Activity	Qty	Points	Percentage
Presentation	1	100	20
Homework	12	10	20
Quizzes	7	10/20	20
Midterm	1	124	20
Final Exam	1	110	20

III. Examination Policy:

I Each student is required to perform each check-off satisfactorily and to complete each assignment. Unsuccessful completion of any check-off procedure will limit your final grade to a maximum of 76%. A maximum of three attempts per check-off are permitted.

II Exams will be scheduled and proctored by the instructor; they will be given in the classroom. If you cannot attend your scheduled exam time, you must notify me prior to the exam so that accommodation can be made. Failure to do so will result in an automatic 10% deduction of the exam grade. Make-up exams MUST be taken within one week of original exam date.

IV. Class Attendance and Homework Make-Up Policy:

Attendance to Zoom lecture sessions and face to face (classroom) sessions are mandatory as understanding of the topics covered are essential to your success this semester in this class.

Homework is due by the date/time posted in Canvas. Assignments that cannot be submitted by the posted due date will be accepted for 3 calendar days following the due date with a 20% reduction in grade earned. Following the 3-day grace period, work submitted late will receive 0 points.

Students who do not attend classes may be administratively withdrawn from those classes. However, failure to attend classes does not constitute withdrawal, and students are expected to process a formal withdrawal through the Student Records Office in Kee Hall

V. Classroom Expectations:

: RESP 2410 Resp Care and Equipment
on: FALL 2026

Course Title: Respiratory Care Equipment and Procedures IV
Start / End Date: 8/17/2026-12/11/2026

All students are expected to conduct themselves in a professional and respectful manner with any interaction between student and staff/instructor. This applies to interaction in the classroom, lab, clinical, and online environment as well as your interactions outside of a formal setting while performing work and discussions