



Course Syllabus: Neonatal- Pediatric Respiratory Care
College of Health Sciences and Human Services
RESP 3553
Fall Semester, August 25, 2025– December 12, 2025

Contact Information

Instructor: Magan Dunbar, MHA, RRT-NPS

Office hours: By appointment.

E-mail: [Email for Magan Dunbar](#)

Course Description

The focus of this course is on the advance theoretical application of respiratory care to the pediatric and newborn patient. Topics include development of the pulmonary and cardiovascular systems, patient assessment, intrinsic lung diseases, congenital heart diseases, SIDS and apnea, applied pharmacotherapy, surfactant replacement therapy, gas therapy, ECMO and ventilator support techniques.

Course Objectives

1. Describe the fetal development of the cardiopulmonary system.
2. Discuss common respiratory disorders in the neonatal and pediatric patient including:
 - Pathology
 - Signs and symptoms
 - Treatment
3. Discuss common therapeutic procedures used in the treatment of neonatal/pediatric patients including:
 - Indications
 - Proper techniques
 - Contraindications
4. Identify ventilation and oxygenation techniques used in the neonatal and pediatric patient.
5. Discuss the use of common conventional therapies used in the neonatal and pediatric patient with newer, specialized therapies.
6. Demonstrate ability to apply research findings to clinical practice issues.

Textbook & Instructional Materials

Walsh, Brian. Neonatal and Pediatric Respiratory Care, 5th Edition. ISBN: 9780323479479

Student Handbook

Refer to: [Student Handbook 2024-2025](#)

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the [Office of Student Conduct](#). Research papers and projects must be original work for each course assignment. The faculty will not accept a submission that has been or is being submitted for another course. No Exceptions.

Use of Artificial Writing Generators

The use of any artificial writing generator (ex: Chat GPT) is strictly prohibited. The use of artificial writing generators can and will be deemed a violation of the university's honor system. Any or all parts of a written assignment identified as having elements of writing attributed to an artificial writing source will automatically receive a zero (0) for a grade. ***Students will not be allowed to make up those assignments.*** This program uses software that detects AI generators. For more policy information regarding cheating and plagiarism, see the Honor System section in this syllabus.

Assignment Grading

Assignments	Percentage of Total Grade
Discussion Boards	20%
Quizzes	50%
Article Assignment	5%
Research Paper	25%

Grading Scale

Letter Grade	Percentage Grade
A	90-100%
B	80-89%
C	75-79%
D	60-74%
F	Less than 60%

A minimum grade of 75, or a C, is required in all respiratory courses. All assignments must be completed by 11:59pm on the due date.

Discussion Boards

The class discussion board or journal is for you to post your comments, assessments, insights or questions on the readings for that week. This concept is slightly different from your typical discussion board where the professor posts a question and you answer it in your own words. This type of journal requires that you reflect on the week's reading assignments and make a substantial post about a topic that interested you specifically. However, this style also allows each student the freedom to discuss topics they find interesting. Choose a topic that interests you that you want to elaborate on. You can see the weeks that will include a journal assignment on the course schedule within the syllabus.

Post requirements:

1. Initial post must be submitted by Wednesday at 11:59pm.
2. Two substantial responses must be made within the discussion board by Sunday at 11:59pm
3. Initial posts should be at least 200 words in content
4. Response posts should be at least 100 words in content
5. Each discussion has a max point value of 6 points. 2 points will be given for your initial post and 2 points will be given for each of your 2 response posts
6. All discussion boards are expected to raise thoughtful questions, incorporate content from readings, build on the ideas of others, expand the class' perspective, appropriately challenge assumptions and perspectives, use citations to support posts in proper APA formatting.

Article Assignment

Select a topic covered within your reading assignments that interests you. Find a current (2023-2025) scholarly article that discusses this topic. Submit a link to the article as well as a brief (1/2 to 1 page) summary of the article. This is not meant to be a long and difficult task. I simply want you to find current information that you feel is important to our profession and would be beneficial to other therapists.

Quizzes

Students are expected to analyze and apply their education and knowledge during these quizzes. Quizzes are located under assessments. You may use learning resources to help you with the quizzes; however, the quizzes are timed at 90 minutes and may only be taken once.

Research Paper

Students will choose one research topic from the list below. This paper will consist of three to five pages of actual content in addition to a title page and reference page. A minimum of **five scholarly resources** published within the last ten years are required for your content. Use in-text citations as well. **This paper must follow APA guidelines.** A great APA resource can be found on the [Purdue OWL website](#). I do expect well-written papers that are at a collegiate

level of writing. A rubric for the writing assignments can be found in D2L.

Research topics:

-Respiratory Therapists role in decreasing length of stay in the NICU or PICU

-Innovative trends in treatment strategies for the Neonatal or Pediatric populations. (Examples may include Surfactant administration methods using LISA or MIST, changes in Neonatal Resuscitation (meconium, gestational age...), new trends in mechanical ventilation (NAVA, non-invasive..)

-Compare and contrast the current trends and outcomes associated with decisions to vaccinate or not vaccinate the neonatal or pediatric patient

Late Work

D2L is designed so that students are locked out of the system after the deadline has passed. Please make note of all deadlines and adhere to them. Anything not completed and submitted on time will be graded as a zero. Please talk with your professor, prior to the due date, regarding circumstances that may prevent you from completing an assignment on time. All assignments must be completed by 11:59pm on the due date.

Important Dates

Last Day to drop with a grade of "W:" November 24, 2025

Refer to: [Drops, Withdrawals & Void](#)

Desire-to-Learn (D2L)

Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into [D2L](#) through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Online Computer Requirements

Taking an online class requires you to have access to a computer (with Internet access) to complete and upload your assignments. It is your responsibility to have (or have access to) a working computer in this class. ***Assignments and tests are due by the due date, and personal computer technical difficulties will not be considered reason for the instructor to allow students extra time to submit assignments, tests, or discussion postings. Your computer being down is not an excuse for missing a deadline!*** There

are many places to access your class! Our online classes can be accessed from any computer in the world which is connected to the internet. Contact your instructor immediately upon having computer trouble. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help, log into [D2L](#).

Change of Schedule

A student dropping a course (but not withdrawing from the University) within the first 12 class days of a regular semester or the first four class days of a summer semester is eligible for a 100% refund of applicable tuition and fees. Dates are published in the Schedule of Classes each semester.

Refund and Repayment Policy

A student who withdraws or is administratively withdrawn from Midwestern State University (MSU) may be eligible to receive a refund for all or a portion of the tuition, fees and room/board charges that were paid to MSU for the semester. HOWEVER, if the student received financial aid (federal/state/institutional grants, loans and/or scholarships), all or a portion of the refund may be returned to the financial aid programs. As described below, two formulas (federal and state) exists in determining the amount of the refund. (Examples of each refund calculation will be made available upon request).

Services for Students With Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to [Student Disability Information](#).

College Policies

Campus Carry Rules/Policies

Refer to: [Campus Carry Rules and Policies](#)

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designated-smoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

Grade Appeal Process

Students who wish to appeal a grade should consult the Midwestern State University [Undergraduate Catalog](#)

Course Schedule:

On the next page, you will find the course schedule. The same content will be in each D2L module as well. I suggest printing a copy of the course schedule to help you stay organized and submit your assignment by the deadlines. Please note that changes in the course syllabus, assignments, and schedule may be made at the discretion of the professor.

Course Schedule

Date	Reading Assignment	Discussions	Assignments	Quizzes
Week 1 Aug 25- Aug 31	Review Syllabus	Introductions Post by <u>Sunday</u> @ 11:59pm		
Week 2 Sept 2- Sept 7	Read Chapters: 4 (Exam & Assess of the Neo/Pedi Pt) 5 (PFT and Bedside Pulmonary Mechanics) 6 (Radiographic Assessment)	Journal #1 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 3 Sept 8- Sept 14	Read Chapters: 8 (Blood Gas Analysis and CV Monitoring) 9 (Noninvasive Monitoring in Neo & Pedi Care)	Journal #2 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 4 Sept 15- Sept 21				QUIZ 1 Chapters – 4,5,6,8,9 Closes Sunday @ 11:59pm
Week 5 Sept 22- Sept 28	Read Chapters: 15 (CPAP) 16 (NIV MV of the Infant and Child) 17 (MV of the Neo and Pedi Pt)	Journal #3 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Monday</u> @ 11:59pm		
Week 6 Sept 29- Oct 5				QUIZ 2 Chapters – 15,16,17 Closes Sunday @ 11:59pm
Week 7 Oct 6- Oct 12	Read Chapters 22 (Neonatal and Pulmonary Disorders) 23 (Surgical Disorders & Resp.	Journal #4 First Post by <u>Wednesday</u> @ 11:59pm		

	Care) 24 (Congenital Cardiac Defects)	Response posts by <u>Sunday</u> @ 11:59pm		
Week 8 Oct 13- Oct 19	Read Chapters 26 (Pedi Airway & Parenchymal Disease) 27 (Asthma) 28 (Cystic Fibrosis)	Journal #5 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 9 Oct 20- Oct 26				QUIZ 3 Chapters - 22,23,24,26,27,28 Closes Sunday @ 11:59pm
Week 10 Oct 27- Nov 2			Article Assignment Due By Nov 2 @11:59PM	
Week 11 Nov 3- Nov 9	Read Chapters 29 (Acute Resp. Distress Syndrome) 31 (Pediatric Trauma) 32 (Disorders of the Pleura)	Journal #6 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 12 Nov 10- Nov 16			Research Paper Due By Nov 16 @11:59PM	
Week 13 Nov 17- Nov 23	Read Chapters 33 (Neuro Disorders) 34 (Transport of Infants and Children) 35 (Home Care)	Journal #7 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		

Week 14 Nov 24- Nov 30	HAPPY THANKSGIVING!!!			
Week 15 Dec 1- Dec 7				QUIZ 4 Chapters - 29,31,32,33,34,35 Closes Sunday@ 11:59pm
Week 16 Dec 8-12			Course Evaluations	