

Course Syllabus: Concepts of Neonatal- Pediatric Respiratory Care
College of Health Sciences and Human Services
RESP 3653-X11
Fall Semester, August 24, 2026– December 11, 2026

Contact Information

Instructor: Magan Dunbar, MHA, RRT-NPS

Office hours: By appointment.

E-mail: magan.dunbar@msutexas.edu

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.

Audience

Distance Respiratory Care Students

Course Objectives

Upon completion of this course, the student will be able to: Describe the fetal development of the cardiopulmonary system. Discuss common respiratory disorders in neonatal and pediatric patients including pathology, signs and symptoms, and treatments. Discuss common therapeutic procedures used in the treatment of neonatal/pediatric patients including indications, proper techniques, and contraindications. Identify ventilation and oxygenation techniques used in neonatal and pediatric patients. Discuss the use of common conventional therapies used in neonatal and pediatric patients with newer, specialized therapies. Demonstrate ability to apply research findings to clinical practice issues.

Textbook & Instructional Materials

Walsh, Brian. Neonatal and Pediatric Respiratory Care, 6th Edition.

ISBN: 9780323793094

American Disabilities Act (ADA)

Midwestern State University (MSU) does not discriminate on the basis of an individual's disability and complies with Section 504 and the Americans with Disabilities Act in its admission, accessibility, and employment of individuals in programs and activities. MSU provides academic accommodations and auxiliary aids to individuals with disabilities, as defined by law, who are otherwise qualified to meet academic and employment requirements. For assistance call (940) 397-

4618 or 397-4515. Please see the instructor outside of class to make any arrangements involving special accommodations. It is the student's responsibility to declare any disabilities. After declaration, preferably at the beginning of each semester, the student needs to contact individual instructors to determine any reasonable accommodations that may be required. More information concerning Disability Support Services at MSU can be found on the [Office of Disabilities Support Webpage](#)

ACADEMIC HONESTY: Plagiarism is the use of someone else's thoughts, words, ideas, or lines of argument in your own work without appropriate documentation (a parenthetical citation at the end and a listing in "Works Cited")-whether you use that material in a quote, paraphrase, or summary. It is a theft of intellectual property and will **not be tolerated**, whether intentional or not.

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.

Student Honor Creed:

"As an MSU Student, I pledge not to lie, cheat, steal, or help anyone else do so."

As students at MSU, we recognize that any great society must be composed of empowered, responsible citizens. We also recognize universities play an important role in helping mold these responsible citizens. We believe students themselves play an important part in developing responsible citizenship by maintaining a community where integrity and honorable character are the norm, not the exception. Thus, We, the Students of Midwestern State University, resolve to uphold the honor of the University by affirming our commitment to complete academic honesty. We resolve not only to be honest but also to hold our peers accountable for complete honesty in all university matters. We consider it dishonest to ask for, give, or receive help in examinations or quizzes, to use any unauthorized material in examinations, or to present, as one's own, work or ideas which are not entirely one's own. We recognize that any instructor has the right to expect that all student work is honest, original

work. We accept and acknowledge that responsibility for lying, cheating, stealing, plagiarism, and other forms of academic dishonesty fundamentally rests within each individual student. We expect of ourselves academic integrity, personal professionalism, and ethical character. We appreciate steps taken by University officials to protect the honor of the University against any who would disgrace the MSU student body by violating the spirit of this creed. Written and adopted by the 2002-2003 MSU Student Senate.

Honor System:

All components of RESP 3653 are designed to represent the efforts of each student INDIVIDUALLY and are NOT to be shared, copied, or plagiarized from other sources. When students submit their efforts for grading, they are attesting they abided by this rule. Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) the acquisition of tests or other academic materials belonging to the university faculty or staff without permission. Plagiarism includes, but is not limited to, the use of, by paraphrase or direct quotation without correct citation in the text and on the reference list, the published or unpublished works of another person. Students may NOT submit papers and assignments that they have previously submitted for this or other courses. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism. Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure of whether a particular situation will be interpreted as academic dishonesty, he/she should ask the instructor for clarification. If students are guilty of academic dishonesty, a grade of zero (0) will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the university. For more information about MSU's policies concerning student conduct and the student handbook, please visit the [Office of Student Conduct Webpage](#)

PLEASE NOTE: 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!

PLEASE NOTE: By enrolling in this course, the student expressly grants MSU a

"limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work product in order to verify originality and authenticity, and for educational purposes. Specifically, faculty may submit student papers and assignments to an external agency to verify originality and authenticity, and to detect for plagiarism.

COURSE TOOLS

Syllabus: contains the syllabus.

Announcements: All announcements will be posted under the NEWS section on the course homepage.

Weekly Course Content Modules: I have broken down your weekly reading assignments, discussion boards, as well as any exams/quizzes that pertain to that specific week and placed them in individual weekly modules. You will also find PowerPoints that pertain to the assigned chapters for that week.

Learning Tools: Here you will find information that may be helpful to you during this course. This may include APA and Writing Information as well as information to aid you in researching online databases.

Email: Use email in the course site when you need to communicate with me or if you wish to communicate with other learners in the course. You can add attachments to the email.

MISSED EXAM, OR OTHER GRADED ITEM POLICY: Anything not completed and handed in on time will be subjected to a "0" for that specific grade. Please talk with your professor, prior to the due date, regarding circumstances that may prevent you from completing an assignment.

All assignments must be completed by 11:59pm of the due date.

APPROXIMATE GRADING SCALE

90-100 Points: A, 80-89: B, 75-79: C, 60-74: D, < 60: F

A minimum grade of 75 (C) is required in all respiratory courses. Failure to attain a minimum grade of C will prevent the student from progressing in the program.

GRADED ITEMS AND GRADE DETERMINATION:

Assignments	Due Date	Grade Percentage
Online Discussions	As assigned	20%
Quizzes	As assigned	50%
Article Assignment	November 1	5%
Neo/Pedi Research Paper	November 15	25%

CLASS PARTICIPATION: Class participation is an integral part of this online course. There are numerous activities that require each student to post opinions from the readings, research, or in response to the discussion by others. You are expected to participate actively in and contribute to the learning experience in this course. Participation means providing substantive comments, questions and contributions that advance the learning process for you and/or other learners in the course. Participation may include responding to questions and issues posed by other learners. Non-substantive comments, irrelevant comments and comments of the nature of "I agree" or "I disagree" (unless the latter two are elaborated upon to make them substantive) do not count towards meeting the participation requirement. You are expected to participate each academic week.

DISCUSSIONS: 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. You may choose to comment on an assigned reading chapter, an article that pertains to that week's chapter readings, or on the chapter questions presented within the text. 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.

During the weeks that include discussion board/journal assignments:

1. **Submit an initial post by Wednesday at 11:59pm.**
2. **Two (2) substantial responses must be made within the discussion board by Sunday at 11:59pm.**

Each journal assignment 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.

In addition to the suggestions above consider these questions when posting your comments:

1. What did you learn? What do you now know that you did not last week?
2. What do you agree with or disagree with
3. How can you apply this information to your clinical practice?
4. What do you conclude?

In all discussion boards students are expected to:

1. Raise thoughtful questions
2. Incorporate content from readings
3. Build on the ideas of others
4. Synthesize across readings and discussions
5. Expand the class' perspective
6. Appropriately challenge assumptions and perspectives
7. Use citations to support post in proper APA format
8. Initial post should be at least **200 words** (approximately 1/2 page); read and respond to two classmate's posts as appropriate using 3), 4), and 6) as guiding elements (avoid "I agree" or "good post" type comments)

9. Follow Discussion Board Netiquette: see below for more info on DB Netiquette, Grading, Scale for Discussion / Journal

6 points	5 points	4 points	3 points	2 points	1 Point	0 points
----------	----------	----------	----------	----------	---------	----------

Participates in discussion board appropriately and always contributes to the discussion in the aforementioned ways meets all of the criteria	Participates in the discussion board regularly and often contributes to the discussion in the aforementioned ways. Lacks 1-2	Participates in the discussion board regularly and sometimes contributes to the discussion in the aforementioned ways. Lacks 3- 4 of the ways listed	Participates in the discussion board sporadically , but does contribute to the discussion in the aforementioned ways. Lacks 5-6 of the ways	Participates in the discussion board sporadically & rarely contributes to the discussion in the aforementioned ways. Lacks 7 or more of the ways listed.	Posts to the discussion board at the last minute. Due to time of post there is little or no opportunity for others	Does not participate in the discussion board. Only read the posts of others.
--	--	--	---	--	--	--

QUIZZES: In-depth quizzes covering specified material given from your readings.

Quizzes may consist of true/false, multiple choice, short answer or essay questions. Quizzes combined are worth 50% of your total grade. The final quiz is due on **December 6th.**

ARTICLE ASSIGNMENT: Select a topic covered within your reading assignments that interest you. Find a current (2015-2026) 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. The Article Assignment is due by **Sunday, November 1 at** 11:59pm.

NEO/PEDI RESEARCH PAPER: This paper will consist of 3-5 pages of material, in addition to your title page & reference page, covering a specific topic within the specialty field of Neonatal and Pediatric Respiratory Care. The topics for the paper must be **one** of the following:

1. Respiratory Therapists role in decreasing length of stay in the NICU or PICU
2. 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..).

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

This paper will be based on research you perform in regards to the given topic. Minimums of 5 current (2015-2026) **scholarly resources** are required for your research. This paper must follow APA guidelines and an APA style guideline resource is provided to you within the additional resources module. An example of a typical APA style research paper can be found in the additional resources module as well. I do expect well written papers that are at a college level of writing. A rubric for the paper will be used for a grading guideline. This paper will be due no later than Sunday, **November 15th** at 11:59pm.

COURSE SCHEDULE:

Date	Reading Assignment	Discussions	Assignments	Quizzes
Week 1 Aug 24- Aug 30	Review Syllabus	Introductions Post by <u>Sunday</u> @ 11:59pm		
Week 2 Aug 31- Sept 6	Read Chapters: 5 (Exam & Assess of the Neo/Pedi Pt) 16 (PFT and Bedside Pulmonary Mechanics) 6 (Radiographic Assessment)	Discussion #1 First Post by <u>Wednesday</u> @ 11:59pm		

		Response posts by <u>Sunday</u> @ 11:59pm		
Week 3 Sept 7- Sept 13	Read Chapters: 7 (Blood Gas Analysis and CV Monitoring) 8 (Noninvasive Monitoring in Neo & Pedi Care)	Discussion #2 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 4 Sept 14- Sept 20				QUIZ 1 Chapters – 5,16,6,7,8 Closes Sunday @ 11:59pm
Week 5 Sept 21- Sept 27	Read Chapters: 13 (CPAP) 13 (NIV MV of the Infant and Child) 14 (MV of the Neo and Pedi Pt)	Discussion #3 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Monday</u> @ 11:59pm		
Week 6 Sept 28- Oct 4				QUIZ 2 Chapters – 13,14 Closes Sunday @ 11:59pm
Week 7 Oct 5- Oct 11	Read Chapters 9 (Neonatal and Pulmonary Disorders) 10 (Surgical Disorders & Resp. Care) 11 (Congenital Cardiac Defects)	Discussion #4 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 8 Oct 12- Oct 18	Read Chapters 23 (Pedi Airway & Parenchymal Disease) 24 (Asthma) 25 (Cystic Fibrosis)	Discussion #5 First Post by <u>Wednesday</u> @ 11:59pm		

		Response posts by <u>Sunday</u> @ 11:59pm		
Week 9 Oct 19- Oct 25				QUIZ 3 Chapters – 9,10,11,23,24,25 Closes Sunday @ 11:59pm
Week 10 Oct 26- Nov 1			Article Assignment Due By Nov 1 @11:59PM	
Week 11 Nov 2- Nov 8	Read Chapters 26 (Acute Resp. Distress Syndrome) 28 (Pediatric Trauma) 29 (Disorders of the Pleura)	Discussion #6 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 12 Nov 9- Nov 15			Research Paper Due By Nov 15 @11:59PM	
Week 13 Nov 16- Nov 22	Read Chapters 30 (Neuro Disorders) 41 (Transport of Infants and Children) 42 (Home Care)	Discussion #7 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		
Week 14 Nov 23- Nov 29	HAPPY THANKSGIVING!!!			
Week 15 Nov 30- Dec 6				QUIZ 4 Chapters - 26,28,29,30,41,42 Closes Sunday@ 11:59pm

Week 16 Dec 7-11			Course Evaluations	
-----------------------------------	--	--	---------------------------	--

Research Paper Rubric

Criteria	Level 5 5 points	Level 4 4 points	Level 3 3 points	Level 2 2 points	Level 1 1 point
Organization	Paper is perfectly organized and extremely detailed. This paper is exemplary in focus and provides information to the reader.	Has a well-organized and detailed paper that catches audience's interest; maintains focus throughout; summarizes main points	Paper that is mostly organized ; provides adequate "road map" for the listener	Paper is heading in the right direction, yet is lacking the necessary organization. Difficult to follow at times.	Has irrelevant and/or unorganized statements; gives listener no focus or outline of the paper

Content	Content, substance, and source material are considered exemplary throughout the paper.	Demonstrate s substance and depth; is comprehensive ; shows mastery of material	Covers topic; uses appropriate sources; is objective	Does not give adequate coverage of topic; lacks sources	No content of substance is presented within this paper.
---------	--	---	--	---	---

Grammar/ Mechanics	Paper is presented with no grammatical, sentence structure, spelling, or	Sentence form and word choices are appropriate. Punctuation grammar, spelling, and mechanics	Some mistakes in sentence form and word choices. Makes a few grammar, spelling, and	Numerous grammatical and sentence structure errors noted	Sentence form and word choices are unacceptable; Punctuation grammar, spelling, and mechanics are unacceptable
	punctuation errors.	are appropriate	mechanical errors.	throughout the paper.	
Assignment Specific Criteria	Paper completely captures the appropriate research. All aspects of the assignment are superbly responded to.	Responds to all aspects of the assignment; Documents research appropriately; considers appropriate audience	Responds to some aspects of the assignment; has some mistakes in research documentation	Lacking substance within research and is minimally associated with the projected audience.	Does not give adequate coverage of assignment; does not document research appropriately; does not consider appropriate audience

Utilization of Resources and References	Exemplary example of resources and reference utilization. Above and beyond.	Utilizes the required number of references that are scholarly and current.	Adequately utilizes the required number of references that are scholarly and current.	Poorly utilizes the required number of references that are scholarly and current.	Completely lacks references and use of scholarly and current resources.
Language and Style	Paper exhibits skillful and exemplary use of language, appropriate vocabulary, and variety in	Paper has excellent use of language, vocabulary and structure of	Overall, the paper has an average use of language, vocabulary and adequate	Paper is below average and needs improvement in areas such as language and vocabulary use as well as the	Poor use of sentence structure and language vocabulary use. Oftentimes, it is difficult to read.
	sentence structure.	sentences .	sentence structure.	structure of its sentences.	
Overall Score	Level 5 24 or more	Level 4 19 or more	Level 3 14 or more	Level 2 9 or more	Level 1 0 or more