

COURSE SYLLABUS SPRING BLOCK B

COURSE TITLE: Neonatal-Pediatric Respiratory Care

COURSE NUMBER: RESP 3553-1NX

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.

CREDITS: 3 credits

COURSE INSTRUCTOR:

Julie Kirkwood, MS, RRT-NPS Email: Julie.kirkwood@msutexas.edu

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 the neonatal and pediatric patient including Pathology, Signs and symptoms and Treatment
- 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 the neonatal and pediatric patient.
- Discuss the use of common conventional therapies used in the neonatal and pediatric patient with newer, specialized therapies.
- Demonstrate ability to apply research findings to clinical practice issues.

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 provide 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 through the <u>MSU Disability Support Services</u> 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.

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 3553 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 guizzes, 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 guiz, 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

***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.

REQUIRED TEXTS:

Walsh, Brian. Neonatal and Pediatric Respiratory Care, 5th Edition. ISBN-13: 9780323479479 Digital ISBN-13: 9780323545938

COURSE TOOLS

- 1. Syllabus---contains the syllabus.
- 2. **Announcements**---All announcements will be posted under the NEWS section on the course homepage.
- 3. 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.
- 4. 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.
- 5. **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	А
80-89	В
75-79	С
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 Journals	As assigned	20%
Quizzes (12.5% each X 4)	As assigned	50%
Article Assignment	April 19	5%
Neo/Pedi Research Paper	May 3	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 than 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:

- Raise thoughtful questions
- Incorporate content from readings
- Build on the ideas of others
- Synthesize across readings and discussions
- Expand the class' perspective
- Appropriately challenge assumptions and perspectives
- Use citations to support post in proper APA format
- Initial post should be at least <u>200 words</u> (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)
 - Follow Discussion Board Netiquette: Click here for more info on <u>DB Netiquette</u>

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 aforemention ed ways meets all of the criteria		and sometimes contributes to the discussion in the	board sporadically, but does contribute to the discussion in the aforemention ed ways. Lacks 5-6 of	contributes to the discussion in the aforemention ed ways. Lacks 7 or more of the	the discussion board at the last minute. Due to	Does not participate in the discussion board. Only reads the posts of others.

Grading Scale for Discussion / Journal

QUIZZES

In-depth quizzes covering specified material given from your readings. Quizzes may consist of true/false, multiple choice, short answer or essay questions. Each quiz is worth 12.5% of your total grade; therefore your quizzes combined are worth 50% of your total grade. The final quiz is due on **Thursday, April 29th** at 11:59pm.

ARTICLE ASSIGNMENT

Select a topic covered within your reading assignments that interest you. Find a current (2015-2021) 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, April 4**th 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 topic will be assigned to you. This paper will be based off of research you perform in regards to the given topic. Minimums of 5 current (2015-2021) 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, **April 18th** at 11:59pm.

COURSE SCHEDULE:

Date	Reading Assignment	Discussions	Assignments	Quizzes
Module 1 March 6 -14	 Review Syllabus Read Chapters: 4 (Exam & Assess of the Neo/Pedi Pt) 5 (PFT and Bedside Pulmonary Mechanics) 6 (Radiographic Assessment) 8 (Blood Gas Analysis and CV Monitoring) 9 (Noninvasive Monitoring in Neo & Pedi Care) 	Introductions Post by <u>Friday, March 12th</u> @ 11:59pm	-	QUIZ 1: Chapters – 4,5,6,8,9 Quiz closes next week March 21
Module 2 March 15 - 21		Journal #1 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		QUIZ 1 Chapters – 4,5,6,8,9 Quiz #1 Closes Sunday March 21 @ 11:59pm
Module 3 March 22 - 28	Read Chapters: 15 (CPAP) 16 (NIV MV of the Infant and Child) 17 (MV of the Neo and Pedi Pt)	Journal #2 First Post by <u>Wednesday</u> @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		QUIZ 2 Chapters – 15,16,17 Closes Sunday @ 11:59pm
Module 4 March 29 – April 4	Read Chapters: 22 (Neonatal and Pulmonary Disorders) 23 (Surgical Disorders & Resp. Care) 24 (Congenital Cardiac Defects)		Article Assignment Due By 11:59pm Sunday, April 4	
Module 5 April 5 - 11	Read Chapters: 26 (Pedi Airway & Parenchymal Disease) 27 (Asthma) 28 (Cystic Fibrosis)	Journal #3 First Post by Wednesday @ 11:59pm Response posts by <u>Sunday</u> @ 11:59pm		QUIZ 3 Chapters - 22,23,24,26,27,28 Closes Sunday @ 11:59pm
Module 6 April 12 - 18			Research Paper Due By 11:59pm on April 18	1
Module 7 April 19 - 25	Read Chapters 29 (Acute Resp. Distress Syndrome) 31 (Pediatric Trauma) 32 (Disorders of the Pleura)	Journal #4 First Post by <u>Wednesday</u> @ 11:59pm Response posts by Sunday @ 11:59pm	1	
Module 8 April 26 - 29	Read Chapters 33 (Neuro Disorders) 34 (Transport of Infants and Children) 35 (Home Care)			QUIZ 4 Chapters - 29,31,32,33,34,35 Quiz Closes <u>Thursday,</u> <u>April 29th @</u> <u>11:59pm</u>

Module 1: March 6 - 14

Learning Objectives

- List steps for initial stabilization of the newborn, including APGAR scoring
- List critical vital signs evaluated as part of the newborn's initial physical exam
- Identify signs, symptoms, and severity of respiratory distress in the newborn
- Define the terminology and various abbreviations used in describing specific aspects of interpreting pulmonary function tests
- Identify specific techniques used to elicit acceptable and repeatable results in children when performing pulmonary function tests
- Describe the special challenges specific to neonates, infants, and children when performing pulmonary function tests or assessing respiratory function
- Compare the various techniques available for measuring airway function and lung volumes in both infants and children
- Explain the methods used to challenge, or provoke, the airways to assess more subtle lung function abnormalities or airway reactivity, and their role in developing a treatment
- Describe the various tests and techniques used at the bedside to assess pulmonary function and lung mechanics in the spontaneously breathing and mechanically ventilated patient
- Identify normal chest structures
- Examine chest radiograph for proper placement of ETT and vascular catheters
- Identify pathologies most commonly visualized on soft tissue images of the neck
- Describe how atelectasis affects the individual lobes of each lung
- Describe the radiographic appearance of cystic fibrosis

Learning Activities and Assignments

• Introductions

Please introduce yourself to the class. Tell us a bit about what you are doing (clinical setting), what you like to do outside of work, and why you decided to work on this degree. Please post a picture of yourself as well so that I can put a face to the name! No response posts to introductions are needed. Please have introduction posts completed by Friday, March 12 @ 11:59pm.

• Quiz One – Chapters 4, 5, 6, 8, 9 (Note special due date for Quiz1)

The quiz is in multiple-choice format. The assessment will test knowledge learned in the textbook readings and PowerPoint lectures. You will have approximately four (4) minutes per question for a total of 100 minutes per quiz. This time allotment is a guideline to help with test completion. Some questions may take less time; some questions may take a bit more time. Students should not depend on a D2L clock to track the time. Many students report success with setting a kitchen timer to ring when there are 5 minutes left. This allows you time to review your answers and submit without penalty.

Quiz closes on March 21 @ 11:59 pm.

Learning Objectives

- Describe indications for obtaining blood gas samples
- Identify common anatomical sampling sites used to obtain blood gases
- Describe potential patient and caregiver complications associated with blood gas sampling
- Interpret a complete hemodynamic profile of a patient
- Identify variables that can shift the oxygen dissociation curve
- Describe the fundamental monitoring methods used to assess heart rate, respiratory rate, and blood pressure
- Recognize the principles of operation of pulse oximetry
- Describe the difference between end-tidal CO₂ monitoring and volumetric capnography
- Explain the physiological phenomenon responsible for a gradient between end-tidal and arterial CO₂ measurements
- List two problems associated with transcutaneous monitoring
- State the objective of indirect calorimetry
- Identify limitations of indirect calorimetry

- Quiz One Chapters 4, 5, 6, 8, 9
 - Quiz closes on March 21 @ 11:59 pm.
- Discussion/Journal 1 Reflect on the week's reading assignments and make a substantial post about a topic that interested you specifically.
 Remember – Your first post is due by Wednesday, March 17 at 11:59pm.
 Then your response posts (at least 2 more postings) are due by Sunday, March 21 at 11:59pm.
 6 points possible

Module 3: March 22 – March 28

Learning Objectives

- Describe the various physiological effects, indications, and contraindications of CPAP
- Identify commonly used delivery systems and nasal interfaces for delivering CPAP
- Determine various strategies used to manage patients receiving CPAP and how these may impact outcomes
- Describe monitoring strategies for determining positive and negative responses to CPAP
- Identify common complications and how they can be avoided when using CPAP
- Review bedside care procedures, performed by clinicians, that contribute to the successful use of CPAP in infants
- Describe various weaning strategies that have been used for withdrawing CPAP in infants
- Describe the effects of NPPV on respiratory function
- Explain the inspiratory pressure support feature of commercial bilevel pressure ventilators
- Discuss how adjustments in inspiratory and expiratory positive airway pressures affect respiratory function
- Discuss common complications and contraindications to NPPV
- Explain when mechanical ventilation is indicated in neonates and pediatrics
- Describe the basic fundamentals for managing patients undergoing mechanical ventilation
- Identify complications associated with mechanical ventilation
- Determine initial ventilator settings for various patient sizes
- Define and discuss various weaning strategies
- Describe high-frequency jet ventilation and high-frequency oscillatory ventilation

Learning Activities and Assignments

- Read Text: Chapter 15, 16, & 17
- Discussion/Journal 2 Reflect on the week's reading assignments and make a substantial post about a topic that interested you specifically. Remember – Your first post is due by Wednesday at 11:59pm. Then your response posts (at least 2 more postings) are due by Sunday at 11:59pm. 6 points possible

• Quiz Two – Chapters 15, 16, & 17

The quiz is in multiple-choice format. The assessment will test knowledge learned in the textbook readings and PowerPoint lectures. You will have approximately four (4) minutes per question for a total of 100 minutes per quiz. This time allotment is a guideline to help with test completion. Some questions may take less time; some questions may take a bit more time. Students should not depend on a D2L clock to track the time. Many students report success with setting a kitchen timer to ring when there are 5 minutes left. This allows you time to review your answers and submit without penalty. **Quiz closes on March 28 @ 11:59 pm.**

Module 4: March 29 – April 4

Learning Objectives

- Identify and differentiate the causes of neonatal respiratory distress and understand the underlying pathophysiology
 of each one
- Discuss the factors in prenatal and postnatal life that may increase the risks for developing respiratory distress
- Recognize the clinical features of common pulmonary disorders in neonates, differentiate among various diagnostic entities, and identify those that are life threatening
- Describe preventive and therapeutic approach for various forms of neonatal pulmonary diseases to optimize outcome and minimize morbidity
- Discuss the anatomy and pathophysiology, the development, pathophysiology, and emergency management of the various congenital anomalies and surgical conditions in newborns and infants
- Discuss the development, anatomy, and pathophysiology of congenital diaphragmatic hernia
- Describe normal cardiac anatomy and blood flow in newborns
- Define shunt and understand the different types of shunts seen with congenital heart disease
- Understand the basic classification schemes for congenital cardiac defects
- Explain the most common congenital cardiac defects
- Recommend ventilator strategies commonly used with various congenital cardiac defects
- Recommend and understand the limitations of various types of physiological monitoring necessary for the care of
 patients with congenital cardiac defects

Learning Activities and Assignments

• Read Text Chapters 22, 23, & 24

• Article Assignment

Select a topic covered within your reading assignments that interest you. Find a current (2015 - 2021) scholarly article that discusses this topic.

- Submit a link to the article
- Submit 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 April 4th at 11:59pm.

Learning Objectives

- · Identify and name upper and lower airway disorders
- Recognize the signs of severe or complete airway obstructions that require interventions
- Describe the basic intervention and recommended therapy for each of the airway disorders and parenchymal lung diseases
- Discuss the different types, and therefore the etiology, of pneumonia
- Explain the pathophysiology of asthma
- Treat asthma from an evidence-based approach
- Identify the five components of asthma
- Explain how to improve the efficacy of the medications we use to treat asthma
- · Describe how the diagnosis of cystic fibrosis is made
- · Understand the pathophysiology of cystic fibrosis
- · List the common pulmonary and nonpulmonary manifestations of cystic fibrosis
- List the current treatments used to manage cystic fibrosis pulmonary disease
- · Discuss the overall prognosis of patients with cystic fibrosis

- Read Text: Chapter 26, 27, & 28
- Discussion/Journal 3 -
 - Reflect on the week's reading assignments and make a substantial post about a topic that interested you specifically.
 - Remember Your first post is due by Wednesday at 11:59pm. Then your response posts (at least 2 more postings) are due by Sunday at 11:59pm. 6 points possible
- Quiz Three–Chapters 22, 23, 24, 26, 27, & 28
 - The quiz is in multiple-choice format. The assessment will test knowledge learned in the textbook readings and PowerPoint lectures. You will have approximately four (4) minutes per question for a total of 100 minutes per quiz. This time allotment is a guideline to help with test completion. Some questions may take less time; some questions may take a bit more time. Students should not depend on a D2L clock to track the time. Many students report success with setting a kitchen timer to ring when there are 5 minutes left. This allows you time to review your answers and submit without penalty.
 - Quiz Closes Sunday, April 11th @ 11:59pm

- 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 from <u>one</u> 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 off of research you perform in regards to the given topics. A minimum of 5 current (2015-2021) scholarly resources are required for your research. I do expect well written papers that are at a collegiate level of writing.
 - This paper must follow APA guidelines and an APA style guideline resource is provided to you within the additional resources module.
 - A rubric for the paper will be used for a grading guideline. This paper will be due no later than Sunday, April 18th @ 11:59pm.

Module 7: April 19 – April 25

Learning Objectives

- Define the criteria to diagnose, the pathological stages, and the pathophysiology of acute respiratory distress syndrome
- Explain the clinical approach to the management of the patient with acute respiratory distress syndrome
- Apply appropriate ventilator strategies in conventional mechanical ventilation of patients with acute respiratory distress syndrome
- Understand the role of high-frequency ventilation and extracorporeal membrane oxygenation in the management of acute respiratory distress syndrome
- Discuss the three general causes of brain damage
- Recognize the spectrum of thoracic injuries seen in pediatric practice
- Explain the complications of blunt thoracic trauma in children
- Discuss the epidemiology and basic management of thermal injury
- Define drowning and other terms used to describe submersion injury
- Discuss strategies for respiratory management of drowning victims
- Describe strategies for prevention of unintentional injuries
- Describe the normal function of the pleural space in healthy children
- List the causes of pneumothorax in neonates and children
- Recognize the causes of pleural effusions and empyema in children of all ages
- Discuss the principles of managing abnormal air or fluid in the pleural space in children

- Read Text: Chapter 29, 31, & 32
- Discussion/Journal 4
 - Reflect on the week's reading assignments and make a substantial post about a topic that interested you specifically. Remember – Your first post is due by Wednesday at 11:59pm. Then your response posts (at least 2 more postings) are due by Sunday at 11:59pm.
 - 6 points possible

Learning Objectives

- Discuss the components of the central and peripheral nervous systems that control normal respiration
- Explain how the nervous system interacts with the muscles of respiration during normal and pathological breathing
- · Describe the important features of the respiratory physical examination for children with neuromuscular weakness
- Describe the tests available to quantify respiratory compromise for children with neuromuscular weakness
- Describe the respiratory aids available to support respiration for children with neuromuscular weakness
- Identify the multisystem and nonrespiratory complications related to neuromuscular disease
- Review and compare the caveats of each mode of transport
- Explain the role of communication during a medical transport
- List the specific equipment needed for pediatric transport
- Review safety and accreditation requirements for pediatric transport agencies
- Discuss the critical components of a discharge plan for the child who is respiratory technology dependent
- Recognize barriers that may delay the hospital discharge of a child who is respiratory technology dependent
- Compare the three types of oxygen systems available for use in the home
- Recognize the need for decannulation and changing the tracheostomy tube
- Discuss how caregivers are best prepared in caring for a ventilator-dependent child at home

- Read Text Chapters 33, 34, & 35
- Quiz Four-Chapters 29, 31, 32, 33, 34, & 35
 - The quiz is in multiple-choice format. The assessment will test knowledge learned in the text book readings and PowerPoint lectures. You will have approximately four (4) minutes per question for a total of 100 minutes per quiz. This time allotment is a guideline to help with test completion. Some questions may take less time; some questions may take a bit more time. Students should not depend on a D2L clock to track the time. Many students report success with setting a kitchen timer to ring when there are 5 minutes left. This allows you time to review your answers and submit without penalty.
 - Quiz closes on Thursday, April 29th @ 11:59 pm.

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 providing 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 paper.	Demonstrates 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 punctuation errors.	Sentence form and word choices are appropriate. Punctuation grammar, spelling, and mechanics are appropriate	Some mistakes in sentence form and word choices. Makes a few grammar, spelling, and mechanical errors.	Numerous grammatical and sentence structure errors noted throughout paper.	Sentence form and word choices are unacceptable; Punctuation grammar, spelling, and mechanics are unacceptable
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 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 sentence structure.	Paper has excellent use of language, vocabulary and structure of sentences.	Overall, paper has an average use of language, vocabulary and adequate sentence structure.	Paper is below average and needs improvement in areas such as language and vocabulary use as well as the structure of its sentences.	Poor use of sentence structure and language vocabulary use. Often times, difficult to read.
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