

Course Syllabus: Neonatal-Pediatric Respiratory Care Robert D. & Carol Gunn College of Health & Human Services RESP 3553-DX1

Spring Block B 2022: March 5, 2022 - May 7, 2022

Contact Information

Instructor: Julie Kirkwood, MS, RRT-NPS E-mail: <u>Julie.Kirkwood@msutexas.edu</u>

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

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 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 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.

Textbook & Instructional Materials

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

ISBN: 9780323479479

Grading

Course Grade - Graded assignments with their percentage of total grade. 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.

Table 1: Percentage allocated to each assignment grade.

Assignments	Percentage
Journals/Discussions	20%
Quizzes (12.5% each x 4)	50%
Article Assignment	5%
Research Paper	25%

Table 2: Total points for final

Grade	Points
Α	90 to100%
В	80 to 89%
С	75 to 79%
D	60 to 74%
F	Less than 60%

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.

JOURNALS / 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. 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.

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 all journal/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. Submit a substantial initial post of at least **200 words** (approximately 1/2 page)
- 9. Read and respond to two classmate's posts as appropriate using the above expectations #3, 4, and 6 as guiding elements (avoid "I agree" or "good post" type comments)

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

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

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 abovementioned ways. Meets all of the criteria items 1-9	Participate in discussion board regularly and often contributes to the discussion in the above- mentioned ways. Lacks 1 -2 of the ways listed.	Participates in discussion board regularly and sometimes contributes to the discussion in the above- mentioned ways. Lacks 3-4 of the ways listed	Participates in discussion board sporadically, but does contribute to the discussion in the above- mentioned ways. Lacks 5-6 of the ways listed.	Participates in the discussion board sporadically & rarely contributes to the discussion in the above- mentioned 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 to provide input.	participate in the discussion board. Only

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, May 5**th at 11:59pm.

ARTICLE ASSIGNMENT

Select a topic covered within your reading assignments that interest you. Find a current (2016-2022) 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 10**th at 11:59pm.

NEO/PEDI RESEARCH PAPER

This paper will be research you perform in regards to a selected topic. 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, etc), new trends in mechanical ventilation (NAVA, non-invasive, etc), new treatments in congenital heart defects or lung disease.
- 3. Compare and contrast the current trends and outcomes associated with decisions to vaccinate or not vaccinate the neonatal or pediatric patient

This paper should be 3-5 pages of material, in addition to your title page & reference page. Minimum of 5 current (2012-2022) 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 24th** at 11:59pm.

Extra Credit

Extra credit will not be granted in this course.

Late Work

Late work will not be accepted. This is a self-paced course and should be completed prior to due dates.

Important Dates

Deadline to file for August 2022 Graduation: June 27, 2022 Last Day to drop Term B with a grade of "W:" 4:00 pm April 11, 2022 Refer to: Spring 2022 Academic Calendar and Drops, Withdrawals & Void

for additional information

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.

Student Handbook

Refer to: Student Handbook

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.

Attendance

This is an online course and students are required to regularly login and check for any announcements posted. Students are expected to attend all meetings of the classes in which they are enrolled. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered as part of the grade, the instructor should so inform students of the specifics in writing at the beginning of the semester in a syllabus or separate attendance policy statement. An instructor who has an attendance policy must keep records on a daily basis. The instructor must give the student a verbal or written warning prior to being dropped from the class. Instructor's records will stand as evidence of absences. A student with excessive absences may be dropped from a course by the instructor. Any individual faculty member or college has the authority to establish an attendance policy, providing the policy is in accordance with the General University Policies.

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. Computers are available on campus in various areas of the buildings as well as the Academic Success Center. 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 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. Additional assistance may be available through Distance Education Resources.

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 a100% 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 Disability Services »Student Life »MSU Texas »

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 and review the Course Drop Instruction under <u>Undergraduate Catalog</u>

Notice: Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Course Schedule

Date	Reading Assignment	Discussions	Assignments	Quizzes
Module 1 March 5 –March 20	Review Syllabus	Introductions Post by		QUIZ 1 Ch: 4,5,6,8,9
*Module 1 has special due dates	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)	Friday, March 11 th @ 11:59pm		Quiz #1 Closes Sunday March 20 @ 11:59pm
Module 2 March 21- March 27		Discussion #1 First Post by Wednesday @ 11:59pm		
		Response posts by Sunday @ 11:59pm		
Module 3 March 28- April 3	Read Chapters: 15 (CPAP) 16 (NIV MV of the Infant and Child) 17 (MV of the Neo and Pedi Pt)	Discussion #2 First Post by Wednesday @ 11:59pm Response posts by Sunday @ 11:59pm		QUIZ 2 Ch: 15,16,17 Closes Sunday, April 3rd @ 11:59pm
Module 4 April 4– April 10	Read Chapters: 22 (Neonatal and Pulmonary Disorders) 23 (Surgical Disorders & Resp. Care) 24 (Congenital Cardiac Defects)		Article Assignment Due by April 10 th @ 11:59pm	•
Module 5 April 11– April 17	Read Chapters: 26 (Pedi Airway & Parenchymal Disease) 27 (Asthma) 28 (Cystic Fibrosis)	Discussion #3 First Post by Wednesday @ 11:59pm Response posts by Sunday @ 11:59pm		QUIZ 3 Ch: 22,23,24,26, 27,28 Closes Sunday, April 17 th @ 11:59pm
Module 6 April 18 – April 24			Research Paper Due By 11:59pm on April 24th	
Module 7 April 25 – May 1	Read Chapters 29 (Acute Resp. Distress Syndrome) 31 (Pediatric Trauma) 32 (Disorders of the Pleura)	Discussion #4 First Post by Wednesday @ 11:59pm Response posts by Sunday @ 11:59pm		
Module 8 May 2 – May 5	Read Chapters 33 (Neuro Disorders) 34 (Transport of Infants and Children) 35 (Home Care)			QUIZ 4 Ch: 29,31,32,33, 34,35 Closes Thursday, <u>May 5th @</u> 11:59pm