

# Course Syllabus: Neonatal- Pediatric Respiratory Care College of Health Sciences and Human Services RESP 3553 Fall Semester, August 28, 2023- December 15, 2023

**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, 5<sup>th</sup> Edition. ISBN: 9780323479479

## Student Handbook

Refer to: Student Handbook 2023-2024

## 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Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given).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!

## Assignment Grading

| Assignments        | Percentage of<br>Total Grade |
|--------------------|------------------------------|
| Discussion Boards  | 20%                          |
| Quizzes            | 50%                          |
| Article Assignment | 5%                           |
| Research Paper     | 25%                          |

## Grading Scale

| Letter Grade | Percentage Grade |
|--------------|------------------|
| Α            | 90-100%          |
| В            | 80-89%           |
| С            | 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

Discussion content and questions will be posted on certain weeks throughout the semester. You can see the weeks that will include a discussion assignment on the course schedule within the syllabus. During the weeks that include discussions, an initial post must be submitted by Wednesday at 11:59pm. Two substantial responses must be made within the discussion board by Sunday at 11:59pm. 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. You can find the discussion board expectations below. The Discussion Board will account for 20% of your final grade. 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. <u>Initial posts should be at least 200 words</u> in content. <u>Response posts</u> should be at least 100 words in content.

## Article Assignment

Select a topic covered within your reading assignments that interests you. Find a current (2022-2023) 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 a list that will be posted in the news feed. This paper will consist of three to four pages of actual content in addition to a title page and reference page. A minimum of five <u>scholarly resources</u> 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 <u>Purdue OWL website</u>. 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.

## 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:" October 30, 2023

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 <u>D2L</u> 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 <a href="Student Disability Information">Student Disability Information</a>.

## 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 <u>Undergraduate Catalog</u>

## 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   | Review Syllabus                                     | Introductions       |             |                            |
| Aug 28-  |   | Post by             |             |                            |
| Sept 3   |   | Sunday @            |             |                            |
|          |   | 11:59pm             |             |                            |
|          |   |                     |             |                            |
| Week 2   | Read Chapters:                                      | Journal #1          |             |                            |
| Sept 4-  | -   | First Post by       |             |                            |
| Sept 10  | 4 (Exam & Assess of the                             | Wednesday @         |             |                            |
|          | Neo/Pedi<br>Pt)                                     | 11:59pm             |             |                            |
|          | <b>5</b> (PFT and Bedside Pulmonary                 | Response            |             |                            |
|          | Mechanics)  | posts by            |             |                            |
|          | <b>6</b> (Radiographic Assessment)                  | Sunday @            |             |                            |
|          | , , ,   | 11:59pm             |             |                            |
| Week 3   | Read Chapters:                                      | Journal #2          |             |                            |
| Sept 11- | 8 (Blood Gas Analysis and CV                        | First Post by       |             |                            |
| Sept 17  | Monitoring)   | Wednesday @         |             |                            |
|          | <b>9</b> (Noninvasive Monitoring in Neo & Pedi Care | 11:59pm             |             |                            |
|          | a rear care   | Response            |             |                            |
|          |   | posts by            |             |                            |
|          |   | Sunday @            |             |                            |
|          |   | 11:59pm             |             |                            |
| Week 4   |   |                     |             | QUIZ 1                     |
| Sept 18- |   |                     |             | Chapters –                 |
| Sept 24  |   |                     |             | 4,5,6,8,9                  |
|          |   |                     |             |                            |
|          |   |                     |             | Closes Sunday @<br>11:59pm |
| Week 5   | Read Chapters:                                      | Journal #3          |             | •                          |
| Sept 25- | 15  | First Post by       |             |                            |
| Oct 1    | (CPAP)  | Wednesday @         |             |                            |
|          | <b>16</b> (NIV MV of the Infant and                 | 11:59pm             |             |                            |
|          | Child)  |                     |             |                            |
|          | 17 (MV of the Neo and Pedi Pt)                      | Response            |             |                            |
|          |   | posts by            |             |                            |
|          |   | Monday @<br>11:59pm |             |                            |
| Week 6   |   | 11.730111           | 1           | QUIZ 2                     |
| Oct 2-   |   |                     |             | Chapters –                 |
| Oct 8    |   |                     |             | 15,16,17                   |
|          |   |                     |             | ,,                         |
|          |   |                     |             | Closes Sunday @            |
|          |   |                     |             | 11:59pm                    |
| Week 7   | Read Chapters                                       | Journal #4          |             |                            |
| Oct 9-   | 22 (Neonatal and Pulmonary                          | First Post by       |             |                            |
| Oct 15   | Disorders)  | Wednesday @         |             |                            |
|          | <b>23</b> (Surgical Disorders & Resp.               | 11:59pm             |             |                            |
|          |   |                     |             |                            |

|           |  |               | 1          |                   |
|-----------|--|---------------|------------|-------------------|
|           | Care)                                  | Response      |            |                   |
|           | <b>24</b> (Congenital Cardiac Defects) | posts by      |            |                   |
|           |  | Sunday @      |            |                   |
|           |  | 11:59pm       |            |                   |
| Week 8    | Read Chapters                          | Journal #5    |            |                   |
| Oct 16-   | 26 (Pedi Airway & Parenchymal          | First Post by |            |                   |
| Oct 22    | Disease)                               | Wednesday @   |            |                   |
|           | <b>27</b> (Asthma)                     | 11:59pm       |            |                   |
|           | 28 (Cystic Fibrosis)                   |               |            |                   |
|           | ( ) ( ) ( ) ( ) ( )                    |               |            |                   |
|           |  |               |            |                   |
|           |  | D             |            |                   |
|           |  | Response      |            |                   |
|           |  | posts by      |            |                   |
|           |  | Sunday @      |            |                   |
|           |  | 11:59pm       |            |                   |
| Week 9    |  |               |            | QUIZ 3            |
| Oct 23-   |  |               |            | Chapters -        |
| Oct 29    |  |               |            | 22,23,24,26,27,28 |
|           |  |               |            |                   |
|           |  |               |            | Closes Sunday @   |
|           |  |               |            | 11:59pm           |
|           |  |               |            | -                 |
| Week 10   |  |               | Article    |                   |
| Oct 30-   |  |               | Assignment |                   |
| Nov 5     |  |               | Due By Nov |                   |
| 1100 5    |  |               | 5          |                   |
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| Week 11   | Read Chapters                          | Journal #6    |            |                   |
| Nov 6-    | 29 (Acute Resp. Distress               | First Post by |            |                   |
| Nov 12    | Syndrome)                              | Wednesday @   |            |                   |
|           | <b>31</b> (Pediatric Trauma)           | 11:59pm       |            |                   |
|           | <b>32</b> (Disorders of the Pleura)    |               |            |                   |
|           |  |               |            |                   |
|           |  | Response      |            |                   |
|           |  | posts by      |            |                   |
|           |  | Sunday @      |            |                   |
|           |  | 11:59pm       |            |                   |
| Week 12   |  |               | Research   |                   |
| Nov 13-   |  |               | Paper Due  |                   |
| Nov 19    |  |               | By Nov 19  |                   |
| 1100 13   |  |               | By NOV 13  |                   |
|           |  |               |            |                   |
| Week 13   | HAPPY THANKSGIVING!!!                  | <u> </u>      | <u> </u>   |                   |
|           | HAPPI IHANKSUIVINU!!!                  |               |            |                   |
| Nov 20-   |  |               |            |                   |
| Nov 26    |  |               |            |                   |
|           |  |               |            |                   |
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| Week 14<br>Nov 27-<br>Dec 3 | Read Chapters 33 (Neuro Disorders) 34 (Transport of Infants and Children) 35 (Home Care) | Journal #7 First Post by Wednesday @ 11:59pm  Response posts by Sunday @ |             |   |
|-----------------------------|--|--|-------------|---|
| Week 15<br>Dec 4-<br>Dec 10 |  | 11:59pm  |             | QUIZ 4<br>Chapters -<br>29,31,32,33,34,35 |
| Week 16                     |  |  | Course      | Closes Sunday@<br>11:59pm                 |
| Dec 11-15                   |  |  | Evaluations |   |