

Reese Campus

## Course Syllabus

COURSE: RSPT 2353.200 Neonatal/Pediatric Cardiopulmonary Care  
SEMESTER: Fall 2015  
CLASS TIMES: 9:00 AM – 10:45 AM  
Tuesday & Thursday  
INSTRUCTOR: Krista Young, BS, RRT-NPS  
OFFICE: 520  
OFFICE HOURS: Monday & Wednesday: 1:30 PM-3:00 PM  
Tuesday & Thursday: 11:00 AM-12:00 PM  
1:30 PM-3:00 PM  
Friday: 9:00 AM- 11:00 AM  
Other Times by Appointment  
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FACEBOOK: <https://www.facebook.com/SouthPlainsCollegeRespiratoryCare>

*"South Plains College improves each student's life."*

### GENERAL COURSE INFORMATION

#### COURSE DESCRIPTION

This course covers advanced concepts of acute care, monitoring, and management as applied to the neonatal and pediatric patient.

#### END OF COURSE OUTCOMES

Describe fetal development and transition to extrauterine life; assess maternal and fetal history; modify therapy to neonatal/pediatric patients; describe the etiology, pathophysiology, clinical manifestations and management of neonatal/pediatric disorders; and analyze, interpret and apply patient data in selective patient care settings.

#### COURSE OBJECTIVES

1. The student will develop the ability to make decisions in the neonatal/pediatric environment, specifying therapeutic goals, considering treatment alternatives, considering risks, and choosing the best treatment approach. (F-8)
2. The student will recognize common problems in neonatal/pediatric respiratory care and design an appropriate plan of action. (F-9)
3. The student will gain an understanding of the cardiopulmonary development from the fetal period through childhood, including the development and function of the integral parts. (F-1, F-2, F-10)
4. The student will develop the ability to evaluate and interpret the data acquired from a prenatal and perinatal history, and gain an understanding of the transition from fetus to neonate. (C-5, C-6, C-7, C-8)
5. The student will acquire data through physical examination and laboratory and radiologic assessment of a child, and use this data to determine the cause and treatment of common pediatric pulmonary disorders. (F-10, F-11, F-12, C-5, C-6, C-7, C-8)
6. The student will acquire data through physical examination and laboratory and radiologic assessment of a child, and use this data to determine the cause and treatment of common congenital cardiac defects. (F-10, F-11, F-12, C-5, C-6, C-7, C-8)
7. The student will gain an understanding of the non-invasive monitoring of children, including the selection of equipment, understanding proper set-up and operation of that equipment, distinguishing trends in data, and troubleshooting malfunctions. (C-16, C-18, C-19, C-20)

8. The student will gain an understanding of the various pediatric/neonatal respiratory treatment modalities, including the selection of equipment, understanding proper set-up and operation of that equipment, distinguishing trends in data, and troubleshooting malfunctions. (C-16, C-18, C-19, C-20)
9. The student will gain an understanding of the use of continuous distending pressure and mechanical ventilation in children, including the selection of equipment, understanding proper set-up and operation of that equipment, distinguishing trends in data, and troubleshooting malfunctions. (C-16, C-18, C-19, C-20)

### ACADEMIC INTEGRITY

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

**Cheating** - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

**Plagiarism** - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

### SCANS and FOUNDATION SKILLS

This course completes the following Foundation Skills: F-1, F-2, F-5, F-6, F-8, F-9, F-10, F-11, F-12. This course completes the following SCANS competencies: C-5, C-6, C-7, C-8, C-10, C-12, C-16, C-18, C-19, C-20. Refer also to Course Objectives. SCANS and Foundation Skills attached.

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

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## SPECIFIC COURSE INFORMATION

### TEXT AND MATERIALS

Students are required to obtain the following:

1. Walsh, Brian. Neonatal and Pediatric Respiratory Care, 4<sup>th</sup> Ed. (2015). St. Louis, Missouri: Saunders, Elsevier Inc.
2. Data Arc

### EVALUATION METHODS

1. Unit examinations
2. Pop quizzes
3. Lab Competencies
4. Comprehensive final examination

### ATTENDANCE POLICY

Regular attendance in RSPT 2353 is necessary to gain proficiency in respiratory care procedures. The student is required to make up any class work missed due to an absence. Please refer to the South Plains College General Catalog (2015-2016) for specific policies on classroom attendance. The advantages of attending every class and reading the text cannot be overemphasized.

## ASSIGNMENT POLICY

1. Students are expected to maintain a reading schedule at home to keep current with classroom discussions.
2. Students must complete laboratory exercises during lab time, individually or in small groups, as assigned. Laboratory exercises and skills practice allow the student to apply the reading and lecture material to actual performance of skills.
3. Students will be required to successfully complete the following competencies in lab:

Neonatal and pediatric vital signs  
Pediatric chest assessment  
Pediatric pulse oximetry  
Pediatric small volume nebulizer  
Pediatric nasotracheal suctioning  
Neonatal oxygen therapy: oxyhood and nasal CPAP  
Pediatric oxygen therapy: nasal cannula  
Pediatric chest physiotherapy  
Neonatal/pediatric: In-line suctioning  
Neonatal manual ventilation via ETT  
Pediatric set up and ventilate via ETT  
Neonatal/pediatric: Securing artificial airway  
Infant set up and ventilation via mask  
Neonatal/pediatric ventilator set up  
Neonatal /pediatric: ventilator check  
Neonatal/pediatric: ventilator parameter change  
Neonatal/pediatric: extubation  
Capillary sampling

All competencies MUST be documented in DataArc by the clinical instructor/preceptor evaluating the student. The student will be evaluated as:

**-Satisfactory (100%)**- ready for clinical application with minimal supervision. Performed procedure accurately, or was able to correct performance without injury to the patient or decreasing effect of therapy being given.

**-Unsatisfactory performance** - not ready for clinical application. Requires remediation under one of the following categories:

- **Minor – Unsatisfactory (75%):** Needs to review fundamental concepts or requires re-evaluation of minor deficiency(s) (ex. forgets to wash hands during the **Follow-up** stage. Must be re-evaluated on this step not the whole procedure).
- **Major – Unsatisfactory (50%):** Requires additional lab practice and complete re-evaluation of the procedure
- If the student receives an unsatisfactory rating (either minor or major), the student may attempt the competency on another laboratory day when he/she has reviewed the procedure and feels prepared. If the student does not successfully complete the competency after the 3<sup>rd</sup> try, he/she must schedule a conference with the DCE before attempting the competency again.
- Each competency attempt will be scored (as indicated above). Ex: If a student scores a 75% on the first attempt and then a 100% on second attempt, the score entered into the grade book is 87.5 for that particular competency.
- The student is not considered proficient in a lab competency until a satisfactory rating has been achieved.

**GRADING POLICY** - Grades in this course will be determined using the following criteria:

Unit Exams	60%
Pop Quizzes	10%
Lab Competencies	5%
Comprehensive Final	25%

A	=	90 – 100
B	=	80 – 89
C	=	75 – 79
F	=	<75

Successful completion of this course requires:

1. A final grade of 'C' (75%) or better.

Students will be allowed to drop their lowest unit exam grade. Make-up exams will not be given.

### **COMMUNICATION POLICY**

Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC" and email systems. Instructor will not initiate communication using private email accounts. Students are encouraged to check SPC email on a regular basis.

If necessary, students may contact me on my personal cell phone between the hours 8:00 am-8:30 pm M-F. On the weekends/holidays, please do not contact me before 10:00 am and after 6:00 pm. If you need to reach me after the hours listed, please send an email to my SPC email. If you will be absent from class, please do not contact me on my cell phone.

The Respiratory Care Program has a Facebook page at <https://www.facebook.com/SouthPlainsCollegeRespiratoryCare> . In addition to the South Plains College website, this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the Respiratory Care Program Facebook page is not mandatory, nor is personal Facebook accounts, in order to access this page.

### **STUDENT CONDUCT**

Students in this class are expected to abide by the standards of student conduct as defined in the SPC Student Guide pages 13-17.

### **CELL PHONE, PAGERS, and OTHER ELECTRONIC DEVICES**

Cell phones distract from the learning environment. For this reason, they should be turned off and put away out of view upon entering the classroom. If you must carry a pager or phone to class for emergency purposes, please see me in advance. If you bring a laptop to class, it should not be used for purposes other than taking notes in class. You may not record lectures in this class.

### **CLASSROOM ETIQUETTE**

Talking incessantly with your neighbor during lectures is not acceptable behavior. If you talk repeatedly in class, I will ask you to leave the room. Please do not leave once class begins to get a snack, get a drink, or any other activity.

### **CHANGES and AMENDMENTS TO SYLLABUS**

The instructor of this course reserves the right to make reasonable changes to the syllabus at any time during the semester. If this occurs, the students will be notified and furnished a copy of all applicable changes or amendments.

## COURSE OUTLINE

**Unit 1: Fetal Development, Fetal Gas Exchange and Circulation, Antenatal Assessment/High risk delivery**  
Reading assignment: Chapter 1, 2, and 3

### Exam 1

**Unit 2: Assessment and Monitoring of the Neonatal and Pediatric Patient and Airway Management**  
Reading assignment: Chapter 4, 13; pg 88-92; pg 115-121; pg 137-142

**Competencies:** Neonatal/Pediatric Vital Signs, Pediatric chest assessment, Pediatric pulse oximetry, Neonatal capillary blood gas, Pediatric NT suctioning, pediatric extubation, Neonatal/pediatric in-line suctioning, Neonatal/pediatric securing artificial airway, pediatric set up and ventilate via ETT, Neonatal manual ventilation via ETT, Infant set up and ventilation via mask

### Exam 2

**Unit 3: Mechanical ventilation**  
Reading Assignment: CH 15, 16, pg. 288-290

**Competencies:** Neonatal nasal CPAP, Neonatal/pediatric ventilator set up, Neonatal/pediatric ventilator check, Neonatal/pediatric ventilator parameter change

### Exam 3

**Unit 4: Pediatric Disorders**  
Reading Assignment: Chapter 11, 12, 27, 28, 31; pg 96-98; pg 148-152; pg 573-583

**Competencies:** Pediatric small volume nebulizer, pediatric nasal cannula, Pediatric chest physiotherapy

### Exam 4

**Unit 5: Neonatal Disorders**  
Reading assignment: Chapter 14, 22; pg 94; pg 157-159; pg 455-459; pg 465-466

**Competencies:** Neonatal oxyhood

### Exam 5

**Unit 6: Congenital Cardiac Defects**  
Reading Assignment: Chapter 24

### Exam 6

## COMPREHENSIVE FINAL EXAM

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## ACCOMMODATIONS

### DIVERSITY STATEMENT

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

### DISABILITIES STATEMENT

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability. For more information, call or visit the Disability Services Office at, Reese Center Building 8, 806-716-4675.

## FOUNDATION SKILLS

### **BASIC SKILLS—Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks**

F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.

F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.

F-3 Arithmetic—performs basic computations; uses basic numerical concepts such as whole numbers, etc.

F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.

F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.

F-6 Speaking—organizes ideas and communicates orally.

### **THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason**

F-7 Creative Thinking—generate new ideas.

F-8 Decision-Making—specifies goals and constraints, generate alternatives, consider risks, evaluates and chooses best alternative.

F-9 Problem Solving—recognizes problems, devises and implements plan of action.

F-10 Seeing Things in the Mind's Eye—organizes and processes symbols, pictures, graphs, objects, and other information.

F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.

F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

### **PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty**

F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.

F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.

F-15 Sociability—demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.

F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control.

F-17 Integrity/Honesty—chooses ethical courses of action.

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## SCANS COMPETENCIES

C-1 **TIME** - Selects goal - relevant activities, ranks them, allocates time, prepares and follows schedules.

C-2 **MONEY** - Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.

C-3 **MATERIALS AND FACILITIES** - Acquires, stores, allocates, and uses materials or space efficiently.

C-4 **HUMAN RESOURCES** - Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

### **INFORMATION - Acquires and Uses Information**

C-5 Acquires and evaluates information.

C-6 Organizes and maintains information.

C-7 Interprets and communicates information.

C-8 Uses computers to process information.

### **INTERPERSONAL—Works With Others**

C-9 Participates as member of a team and contributes to group effort.

C-10 Teaches others new skills.

C-11 Serves Clients/Customers—works to satisfy customer's expectations.

C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.

C-13 Negotiates—works toward agreements involving exchanges of resources; resolves divergent interests.

C-14 Works With Diversity—works well with men and women from diverse backgrounds.

### **SYSTEMS—Understands Complex Interrelationships**

C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.

C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.

C-17 Improves or Designs Systems—suggests modifications to existing systems and develops new or alternative systems to improve performance.

### **TECHNOLOGY—Works with a Variety of Technologies**

C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.

C-19 Applies Technology to Task—understands overall intent and proper procedures for setup and operation of equipment.

C-20 Maintains and Troubleshoots Equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies.

**SOUTH PLAINS COLLEGE  
RESPIRATORY CARE PROGRAM**

**COURSE AGREEMENT**

I have received a copy of the course syllabus for RSPT 2353-200. I have reviewed the syllabus, and understand the course format, course competencies, attendance policy, and examination system. I further understand my responsibilities and rights, as explained by the instructor and listed in the syllabus, and agree to all course requirements as stated in the course syllabus.

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Printed Name

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Signature

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Date