Reese Campus

# **Course Syllabus**

COURSE: RSPT 2353.200 Neonatal/Pediatric Cardiopulmonary Care

SEMESTER: Fall 2016

CLASS TIMES: 9:00 AM - 10:45 AM

Tuesday & Thursday

INSTRUCTOR: Krista Young, BS, RRT-NPS

OFFICE: 520

OFFICE/ADVISING

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 A

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-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.

# **SPECIFIC COURSE INFORMATION**

#### **TEXT AND MATERIALS**

Students are required to obtain the following:

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

#### **EVALUATION METHODS**

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

# **ATTENDANCE POLICY**

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work

missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

Regular attendance is necessary to successfully meet the course objectives. The student is responsible for all class work covered during absences from class. Students are expected to be in class, on time. A student is tardy if he/she arrives more than 5 minutes after class begins. If a student is tardy to class three times, it will be counted as one absence. It is the student's responsibility to inform the instructor of the reason for an absence and to do so in a timely fashion. A student may be administratively withdrawn from the course if he/she has more than <u>five</u> absences from class and the instructor determines the student is unable to successfully meet the course objectives.

Students who are tardy are asked to respect their peers and enter the classroom quietly in order not to disrupt the class. Students who are late to a class starting with an examination <u>will not</u> be given additional time to complete the exam. The exam will be finished when the last on-time student has completed.

#### **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/pediatric manual ventilation 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 lab competencies will be documented in DataArc by the instructor evaluating the student. The student is not considered proficient in a competency until a satisfactory rating has been achieved. The student will be evaluated as:

**Satisfactory** (100%)- ready for clinical application with minimal supervision. Performed procedure accurately.

**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. Student may attempt these missed steps on the same day, if time allows.
- Major Unsatisfactory (50%): Requires additional lab practice and complete re-evaluation of the procedure. If the student receives an unsatisfactory rating (major), the student may attempt the competency on another laboratory day when he/she has reviewed the procedure and feels prepared.
- 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.
- If a student is unable to successfully complete a competency after 2 attempts, remediation will be required. Please see 'Remediation' below for details.

**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 D= 65-74 F= <65

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.

# **REMEDIATION**

If a student fails an exam that is accounted for in the grading system (non- dropped exams), the student will be required to make an appointment with the Respiratory Care faculty within one week of the exam in order to develop a written plan to gain better understanding of the material covered on the exam. This plan will designate responsibilities of all involved parties and may include but not limited to: review of exam topics, written discussion of topics, and oral discussion of topics.

Please refer to the 2016-2017 Respiratory Care Program student handbook (pg 15-16) for the remediation policy for lab competencies.

#### **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 <a href="https://www.facebook.com/SouthPlainsCollegeRespiratoryCare">https://www.facebook.com/SouthPlainsCollegeRespiratoryCare</a> . 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. The SPC Student Guide is located under the online publications link at <a href="https://www.southplainscollege.edu">www.southplainscollege.edu</a>.

# **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 142-143

**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, 17, 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; 506-513; 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** 

# **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 to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 809-716-2577, Reese Center Building 8, 806-716-4675, or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

# **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.

#### 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**

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Printed Name	Signature	Date