Course Syllabus

COURSE: RSPT 2325 Cardiopulmonary Diagnostics

SEMESTER: Spring 2024

CLASS LOCATION: Reese Building 2 Room 233 CLASS TIMES: 10:00 AM – 11:20 AM

Tuesday-Thursday

INSTRUCTOR: Ron Edwards, BS, RRT

OFFICE: Room 223E

OFFICE HOURS: Tuesday & Thursday: 2:00 PM – 4:00 PM

Friday 8:00 AM - Noon

Other Times by Appointment

OFFICE PHONE: (806) 716-4625

E-MAIL: redwards@southplainscollege.edu

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

GENERAL COURSE INFORMATION

COURSE DESCRIPTION

This course is a study of physical, radiological, hemodynamic, laboratory, nutritional, and cardiopulmonary diagnostic assessments.

STUDENT LEARNING OUTCOMES

Interpret patient data including physical, radiological, hemodynamic, laboratory, nutritional, and cardiopulmonary diagnostic assessment of the pulmonary patient; and apply data to evaluate cardiopulmonary disorders.

COURSE OBJECTIVES - Outline form (correlated to Scans and Foundations Skills)

- 1. Acquire and evaluate information through such procedures as physical examination, blood gases, pulmonary functions and hemodynamics. (F-1, F-2, F-5, F-6, F-7, F-8, F-9, F-10, F-12, C-5, C-6, C-7, C-14, C-19, C-20)
- 2. Interpret data from physical examination and laboratory testing, and communicate that data to other members of the healthcare team. F-1, F-2, F-5, F-6, F-7, F-8, F-9, F-10, F-12, C-5, C-6, C-7, C-9, C-14)
- 3. Distinguish trends in laboratory test results and/or physical findings, predict the impact on the patient, and choose the appropriate response to correct problems. (C-16)
- 4. Choose the appropriate testing modalities for a given patient problem. (C-18)
- 5. Use assessment data to specify patient goals, suggest modifications to current treatment modalities, or design new treatment plans, consider risks, and choose the best alternative to improve patient performance. (F-8, C-17)
- 6. Choose the correct formula and calculate hemodynamic values and indexes. (F-3, F-4)

EVALUATION METHODS

- 1. Four unit exams will be given. **Make up exams will not be given**. The lowest scored unit exam grade will be dropped and not calculated into the exam percentages.
- 2. Assignments / Quizzes
- 3. A comprehensive final examination will be given.

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-3, F-4, F-5, F-6, F-8, F-9, F-10, and F-12. This course completes the following SCANS competencies: C-3, C-5, C-6, C-7, C-8, C-15, C-16, C-17, C-18, C-19, and C-20. Refer also to Course Objectives. SCANS and Foundation Skills attached.

VERIFICATION OF WORKPLACE COMPETENCIES – Health Occupations Division

Successful completion of this course is required for the student to be eligible to sit for the Certification Exam for Entry-Level Respiratory Therapists, and to obtain a Texas License to practice Respiratory Care.

BLACKBOARD

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.

FACEBOOK

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, and 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.

SPECIFIC COURSE INFORMATION

TEXT AND MATERIALS

Students are required to obtain the following:

- 1. Wilkins, Robert L. <u>Clinical Assessment in Respiratory Care</u>, 9th Ed., (2022). By Elsevier, Inc. ISBN: 9780323696999
- 2. AHA 2020 ACLS Provider Manual 2020 American Heart Association, Incorporated (2015) Paperback ISBN# 978-1-61669-7723 (This should be available in the Library TBA for checkout.

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 the 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 date.

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's 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.

he/she has more 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 than <u>5</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. A student's work schedule is not an excuse for missing classes.

COMPUTER USAGE

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to computers and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their username and password.

ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USERNAME AND PASSWORD.

COMPUTER LAB USAGE

The computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class.

PROCTORIO

This course uses a tool called Proctorio. Proctorio is a remote proctoring service software that works within your web browser to confirm student identity and monitor students taking quizzes/exams.

Before Using Proctorio

- In order to use Proctorio, you must have a basic webcam or built-in camera with a microphone enabled on your laptop or desktop computer.
- You must have the Chrome browser on your computer. <u>Download Chrome</u>.
- You must install the <u>Proctorio Chrome extension (Links to an external site.)</u>.
- Check the <u>Proctorio Minimum System Requirements (Links to an external site.)</u> to ensure Proctorio will work on your computer.
- You may be required to show a government or school-issued ID if your instructor is requiring Proctorio for any quizzes/exams.

Proctorio FAQs

Q: Can I listen to music while taking the exam?

A: Please refrain from doing so; if there are high noise levels, your exam will be flagged.

Q: Is someone watching me take the test since it is proctored (via Proctorio)?

A: Absolutely not! Although you are being recorded while taking the quiz/exam, the instructor is the only one who has access to your quiz/exam attempt.

Q: What if I have to get up to use restroom during the quiz/exam?

A: Similar to on-site exams, this is highly discouraged! If you MUST leave the room, please send your instructor a message (Remind app or via text) letting them know that your quiz/exam attempt might be "flagged." Please do your best to plan ahead and "go" before beginning the quiz/exam!

Q: Can I take the quiz/exam from any location?

A: **Traditional Students** will be required to complete their exams at the Reese campus unless otherwise notified.

Distance Learners will be required to complete their exams at their sponsored facility in a designated area.

Proctorio Technical Support

(760) 227-7129 - Available 24/7 (This is a phone number just for Coastline students.)

Email: support@proctorio.com

ASSIGNMENT POLICY

- 1. Students are expected to maintain a study schedule at home to keep current with classroom discussions.
- Students <u>must</u> complete laboratory exercises during lab time, individually or in small groups, as assigned.
 Laboratory exercises and skills practice allows the student to apply the reading and lecture material to actual performance of skills.
- 3. Students <u>must</u> complete the lab proficiencies listed in the syllabus for each unit. When the student feels he/she has had sufficient lab practice and have completed any assigned lab exercises, he/she may attempt to perform the lab proficiency. When successfully completed, the student may practice the learned skill in the clinical setting under direct supervision. When the student feels sufficiently prepared, he/she may attempt the procedure in an actual patient setting under direct observation of a clinical instructor. If successfully completed, the student may then perform the skill in the clinical setting. If the proficiency is not successfully completed, the student must return to practice and attempt the skill at another time.
- 4. ACLS rhythm and treatment assignment

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

Unit Exams: 60% Assignments/Quizzes: 15% Comprehensive Final: 25%

A = 90 - 100 B = 80 - 89 C = 75 - 79F = 0 - 74

Successful completion of this course requires:

- 1. A final grade of "C" or better.
- 2. Successful completion of all laboratory and assigned proficiencies.
- 3. Following course attendance policy during the semester.

COMMUNICATION POLICY

Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC", REMIND, and email systems. Instructors will not initiate communication using private email accounts. Students should regularly check Blackboard, Remind app, and email systems for specific course assignments/announcements.

Students may contact me through E-mail or office phone.

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.

STUDENT CONDUCT

Rules and regulations relating to the students at South Plains College are made with the view of protecting the best interests of the individual, the general welfare of the entire student body, and the educational objectives of the college. As in any segment of society, a college community must be guided by standards that are stringent enough to prevent disorder, yet moderate enough to provide an atmosphere conducive to intellectual and personal development. A high standard of conduct is expected of all students. When a student enrolls at South Plains College, it is assumed that the student accepts the obligations of performance and behavior imposed by the college relevant to its lawful missions, processes, and functions. Obedience to the law, respect for properly constituted authority, personal honor, integrity, and common sense guide the actions of each member of the college community both in and out of the classroom. Students are subject to federal, state, and local laws, as well as South Plains College rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens. Students are subject to such reasonable disciplinary action as the administration of the college may consider appropriate, including suspension and expulsion in appropriate cases for breach of federal, state, or local laws, or college rules and regulations. This principle extends to conduct off-campus which is likely to have adverse effects on the college or on the educational process which identifies the offender as an unfit associate for fellow students. Any student who fails to perform according to expected standards may be asked to withdraw. Rules and regulations regarding student conduct appear in the current Student Guide.

The SPC Student Guide can be found at the following link: http://catalog.southplainscollege.edu/content.php?catoid=49&navoid=1321

COVID-19

If you are experiencing any of the following symptoms, please do not attend class and either seek medical attention or test for COVID-19.

- · Cough, shortness of breath, difficulty breathing
- Fever or chills
- Muscles or body aches
- Vomiting or diarrhea
- New loss of taste and smell

Please also notify DeEtte Edens, BSN, RN, Associate Director of Health & Wellness, at dedens@southplainscollege.edu or 806-716-2376. Proof of a positive test is required. A home test is sufficient but students must submit a photo of the positive result. The date of the test must be written on the test result and an ID included in the photo. If tested elsewhere (clinic, pharmacy, etc.), please submit a copy of the doctor's note or email notification. Results may be emailed to DeEtte Edens, BSN, RN at dedens@southplainscollege.edu.

A student is clear to return to class without further assessment from DeEtte Edens, BSN, RN if they have completed the 5-day isolation period, symptoms have improved, and they are without fever for 24 hours without the use of fever-reducing medication.

Students must communicate with DeEtte Edens, BSN, RN prior to their return date if still symptomatic at the end of the 5-day isolation.

EMERGENCY MESSAGES

The student should notify his/her family that in case of an emergency during the normal class schedule, they should call the Nursing Office at (806)716-2391 or (806)716-2193. Class will not be interrupted unless it is an emergency, so they must identify themselves and say it is an emergency to get immediate action.

DROPPING A CLASS

Students should submit a **Student Initiated Drop Form** online.

Students will not be required to obtain an instructor signature to drop, however, we do encourage students to communicate with instructors or advisors prior to dropping a course when they are able. There will be no charge for drops for the fall or spring semesters.

WITHDRAWING FROM ALL CLASSES

If a student wishes to withdraw from all courses, they should initiate that process with the Advising Office. They can schedule an appointment with an advisor by visiting http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php or by calling 806-716-2366.

SCHEDULE CHANGE (after late registration and before census date)

To make a schedule change after late registration (January 20th) and before the census date (January 31st), students should submit a **Schedule Change Form**.

After late registration, adding a class requires instructor approval. If a student is requesting to be added to one of your courses and you approve, please email registrar@southplainscollege.edu with your approval. This can take the place of signature on the Schedule Change Form that we have required in the past.

For additional information regarding schedule changes, drops and withdrawals, <u>click here</u>.

SPECIAL REQUIREMENTS

Cell Phones – Cell phones are to be turned <u>OFF</u> or silenced during scheduled class periods unless prior approval has been given from the instructor. This includes text messaging. Cell phones are to be used <u>outside</u> the classroom only. Students are not allowed to have cell phones during exams.

SYLLABUS STATEMENTS

Statements for the following items can be found at Syllabus Statements (southplainscollege.edu)

- Intellectual Exchange Statement
- Disabilities Statement
- Non-Discrimination Statement
- Title IX Pregnancy Accommodations Statement
- CARE (Campus Assessment, Response, and Evaluation) Team
- Campus Concealed Carry Statement

CHANGES AND AMENDMENTS TO SYLLABUS

The program director or the clinical coordinator 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: Clinical Laboratory Studies

Reading Assignment: Wilkins Chapter 7

Notes Exam #1

Unit 2: Advanced Physical Assessment, Nutritional Assessment, Chest Tubes, and Chest Radiography

Reading Assignment: Wilkins Chapters 5, 6, 18, and 10.

Lab: Chest Tubes and Chest Radiography

Notes

Assignment: Chest X-Ray Interpretation

Exam #2

Unit 3: Cardiac Output and Invasively Monitored Hemodynamics

Reading Assignment: Wilkins Chapter 15 and 16

Notes

Assignment: Hemodynamic Interpretation/Troubleshooting

Lab: A-Line, CVP, and Swan Ganz Catheters

Exam #3

Unit 4: Cardiopulmonary Disorders of Circulation

Reading Assignment: Notes

Exam #4

Unit 5: Capnography, FeNO, ECMO, & Nitric Oxide and Pulmonary Artery Vasodilators

Reading Assignment: Wilkins, pp. 314 – 316 (ETCO2/Capnography)

Notes

UNIT 5 MATERIAL WILL BE ASSESSED ON FINAL EXAM

Comprehensive Final Exam

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–generates new ideas.
- F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers 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.

January 2024



Course Agreement 2024

RSPT 2325-200

I have received a copy of the course syllabus. I have reviewed the syllabus thoroughly, and understand the course format, attendance and tardy policies, and examination system. I further understand my responsibilities and rights, as explained by the instructor and listed also in the syllabus, and agree to all course requirements as stated in the syllabus.

Student's Name (print)	
Student's Signature	_
	Date