| **PROFESSOR:** |  |
| --- | --- |
| **OFFICE LOCATION:** |  |
| **OFFICE HOURS:** |  |
| **PHONE NUMBER:** |  |
| **E-MAIL:** |  |
| **SEMESTER:** |  |
| **DELIVERY METHOD:** |  |

# COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS:

## RET 1024 Introduction to Cardiopulmonary Technology (3 Credits)

This course begins with an orientation to the Respiratory Care and Cardiovascular Technology Professions. The historical development of and current trends in cardiopulmonary technology are discussed. The basics of applied cardiopulmonary anatomy and physiology as related to cardiopulmonary structure and function are introduced. There are weekly assignments for selected Medical Terminology and basic medical practice, related to asepsis.

## PREREQUISITES FOR THIS COURSE:

Permission to enter into the Respiratory Care or Cardiovascular Programs

### CO-REQUISITES FOR THIS COURSE:

None

## GENERAL COURSE INFORMATION:

Topic Outline

Compare the job functions of a Respiratory therapist to those of a Cardiovascular Technologist.

Name the national organizations, accrediting agencies and national examination bureau for Respiratory Care and Cardiovascular Technology.

Define common terminology and abbreviations used in medicine particularly as it pertains to the cardiopulmonary systems.

Locate and use medical journals and web sites provided by the school library and by professional organizations.

Identify anatomic structures of the cardiopulmonary system from models or diagrams.

Describe the function of anatomic structures of the cardiopulmonary system.

Define lung volumes and capacities.

Explain the concept of ventilation in terms of pleural and pulmonary pressure changes and gas flow.

Label and describe the various histological layers of blood vessels.

Name in sequence the blood vessels of the human body from the aorta through body tissues and back to the right heart.

List the heart chambers and valves through which blood passes from the time it enters the vena cava, through its path through the lungs and back through the left heart to the aorta.

Analyze a standard normal ECG in relation to cardiac electrical conductance.

Calculate VT, VD, VA, VE.

Explain basic gas laws as they pertain to ventilation and gas transport

## ALL COURSES AT FLORIDA SOUTHWESTERN STATE COLLEGE CONTRIBUTE TO THE GENERAL EDUCATION PROGRAM BY MEETING ONE OR MORE OF THE FOLLOWING GENERAL EDUCATION COMPETENCIES:

**C**ommunicate clearly in a variety of modes and media.

**R**esearch and examine academic and non-academic information, resources, and evidence.

**E**valuate and utilize mathematical principles, technology, scientific and quantitative data.

**A**nalyze and create individual and collaborative works of art, literature, and performance.

**T**hink critically about questions to yield meaning and value.

**I**nvestigate and engage in the transdisciplinary applications of research, learning, and knowledge.

**V**isualize and engage the world from different historical, social, religious, and cultural approaches.

**E**ngage meanings of active citizenship in one’s community, nation, and the world.

A. General Education Competencies and Course Outcomes

1. Listed here are the course outcomes/objectives assessed in this course which play an integral part in contributing to the student’s general education along with the general education competency it supports.

General Education Competency: Evaluate

Course Outcomes or Objectives Supporting the General Education Competency Selected:

Analyze a standard normal ECG in relation to cardiac electrical conductance.

Calculate VT, VD, VA, VE.

Explain basic gas laws as they pertain to ventilation and gas transport.

Demonstrate an advanced knowledge of cardiovascular anatomy and physiology.

Discuss the transmission of blood through the body .

## DISTRICT-WIDE POLICIES:

### PROGRAMS FOR STUDENTS WITH DISABILITIES

Florida SouthWestern State College, in accordance with the Americans with Disabilities Act and the College’s guiding principles, offers students with documented disabilities programs to equalize access to the educational process. Students needing to request an accommodation in this class due to a disability, or who suspect that their academic performance is affected by a disability should contact the Office of Adaptive Services at the nearest campus. The office locations and telephone numbers for the Office of Adaptive Services at each campus can be found at <https://www.fsw.edu/adaptiveservices>.

### REPORTING TITLE IX VIOLATIONS

Florida SouthWestern State College, in accordance with Title IX and the Violence Against Women Act, has established a set of procedures for reporting and investigating Title IX violations including sexual misconduct. Students who need to report an incident or need to receive support regarding an incident should contact the Equity Officer at [equity@fsw.edu](mailto:equity@fsw.edu). Incoming students are encouraged to participate in the Sexual Violence Prevention training offered online. Additional information and resources can be found on the College’s website at <https://www.fsw.edu/sexualassault>.

## REQUIREMENTS FOR THE STUDENTS:

List specific course assessments such as class participation, tests, homework assignments, make-up procedures, etc.

## ATTENDANCE POLICY:

The professor’s specific policy concerning absence. (The College policy on attendance is in the Catalog and defers to the professor.)

## GRADING POLICY:

Include numerical ranges for letter grades; the following is a range commonly used by many faculty:

| **Grade Percent** | **Letter Grade** |
| --- | --- |
| 90 - 100 | A |
| 80 - 89 | B |
| 70 - 79 | C |
| 60 - 69 | D |
| Below 60 | F |

(Note: The “incomplete” grade [“I”] should be given only when unusual circumstances warrant. An “incomplete” is not a substitute for a “D,” “F,” or “W.” Refer to the policy on “incomplete grades.)

## REQUIRED COURSE MATERIALS:

(In correct bibliographic format.)

## RESERVED MATERIALS FOR THE COURSE:

Other special learning resources.

## CLASS SCHEDULE:

This section includes assignments for each class meeting or unit, along with scheduled Library activities and other scheduled support, including scheduled tests.

## ANY OTHER INFORMATION OR CLASS PROCEDURES OR POLICIES:

(Which would be useful to the students in the class.)