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

1. **COURSE NUMBER AND TITLE, CATALOG DESCRIPTION, CREDITS:**

**RET 1613C CARDIOPULMONARY ANATOMY AND PHYSIOLOGY (2 CREDITS)**

This course covers: cardiopulmonary anatomy and physiology in detail, diffusion and transport of cardio-respiratory gases, blood gas, renal and acid base physiology, ECG and basic hemodynamic analysis, cardiopulmonary exercise testing, and human gestational development of the cardiopulmonary systems. The physiologic calculations related to quantification of cardiopulmonary performance are also emphasized.

1. **PREREQUISITES FOR THIS COURSE:**

RET 1024 with a grade of “C” or better

**CO-REQUISITES FOR THIS COURSE:**

None

1. **GENERAL COURSE INFORMATION:** Topic Outline.

The student will demonstrate knowledge in applied cardio pulmonary anatomy and physiology and integrate key aspects of patient care practice in the following areas:

* Pulmonary Function Measurements
* Diffusion of Pulmonary gases as they relate to Pulmonary & Systemic Blood Flow
* Oxygen Transport
* CO2 Transport
* Acid-Base Balance
* Control of Ventilation and the Autonomic Nervous System
* Ventilation Perfusion Relationships
* Hemo-dynamic Measurements
* Cardiac Performance
* Cardiac Electrophysiology
* Confidentiality Issues in Health Care
* Renal Function and Cardiopulmonary Physiology
* Adult, Pediatric and Neonatal Vital Signs Assessment
* Gestational Development of the C.P. System
* Cardiopulmonary Performance under Stress and in Hypobaric Environments

1. **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:

* The student will demonstrate understanding and operational management for the scientific knowledge which underlies the physical and chemical properties of gaseous diffusion, Oxygen and Carbon Dioxide transport in normal and abnormal human physiology.
* Each student’s individual expertise will be demonstrated through interactive oral Socratic-method quizzes and multiple choice section exams.
* The student will demonstrate an advanced knowledge of cardiovascular anatomy and physiology principles with special focus upon Electrophysiology and Hemodynamic principles.
* Each students‘ individual expertise will be demonstrated through interactive oral Socratic-method quizzes and multiple choice section exams.

General Education Competency: **Think**

Course Outcomes or Objectives Supporting the General Education Competency Selected:

* The student will both discuss and demonstrate critical thinking regarding the integrative nature of the Pulmonary, Cardiac, Renal and Neurological Systems, in the control of Breathing, Blood Flow, Oxygenation and Acid Base homeostasis.
* Each student’s individual expertise will be demonstrated through interactive oral Socratic-method quizzes and multiple choice section exams.

1. **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 <http://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 <http://www.fsw.edu/sexualassault>.

1. **REQUIREMENTS FOR THE STUDENTS:**

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

1. **ATTENDANCE POLICY:**

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

1. **GRADING POLICY:**

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

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.)

1. **REQUIRED COURSE MATERIALS:**

(In correct bibliographic format.)

1. **RESERVED MATERIALS FOR THE COURSE:**

Other special learning resources.

1. **CLASS SCHEDULE:**

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

1. **ANY OTHER INFORMATION OR CLASS PROCEDURES OR POLICIES:**

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