**School of Health Professions**

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

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

**CVT 2805 Cardiovascular Interventional Pre-Practicum (3 Credits)**

This course builds on the knowledge and skills from CVT 1801C. Areas of concentration in this pre-clinical course include interventional cardiac catheterization, balloon angioplasty, rotational atherectomy and intracoronary stenting.

**II. PREREQUISITES FOR THIS COURSE:**

CVT 2420 and CVT 2620

**CO-REQUISITES FOR THIS COURSE:**

CVT 2842C

**III. GENERAL COURSE INFORMATION:**

Topic Outline

In this pre-clinical course, students will demonstrate knowledge in laboratory activities to practice the skills required to function in the interventional cardiac catheterization laboratory.

* Interventional cardiac catheterization
* Equipment selection and setup
* Practice of radiation safety protocols
* Practice of simulated interventional cardiac catheterization procedures
* Pre- and post-interventional cardiac catheterization patient care
* Pre-procedure preparation and teaching
* Post-procedure monitoring, care, and teaching

Students will complete the objectives and demonstrate the knowledge, skills and competencies required in  order to be checked off on the skills checklists.

**IV. 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: **Communicate**

Course Outcomes or Objectives Supporting the General Education Competency Selected:

* + Demonstrate the proper way to prepare the balloon for use in an angioplasty.
	+ Demonstrate the proper way to prepare the stent for use in an angioplasty.
	+ Demonstrate helping physician insert the guide catheter.
	+ Demonstrate helping physician cannulate the coronary artery with the guide catheter.
	+ Demonstrate helping physician with the insertion of the coronary guide wire.
	+ Demonstrate helping physician with placing the coronary guide wire across the lesion.

2. Listed here are the course outcomes/objectives assessed in this course which play a supplemental role in contributing to the student’s general education along with the general education competency it supports.

General Education Competency: **Think**

Course Outcomes or Objectives Supporting the General Education Competency Selected: Define and discuss the progression and symptoms of peripheral artery disease

* List and define the equipment used in a percutaneous transluminal coronary angioplasty.
* List and explain the steps in a percutaneous transluminal coronary angioplasty.
* List and explain the steps used to determine vessel size and lesion length.

**B. Other Course Objectives/Standards**

**Upon satisfactory completion of this course, the student will be able to:**

• Compare and contrast the anatomy of an artery.

• Define and discuss coronary artery disease.

• Compare and contrast coronary artery disease morphology.

• Compare and contrast stable and unstable plaque.

• Compare and contrast types of lesions.

• List and define the equipment used in a percutaneous transluminal coronary angioplasty.

• List and explain the steps in a percutaneous transluminal coronary angioplasty.

• List and explain the steps used to determine vessel size and lesion length.

• Compare and contrast bare metal stents and drug eluting stents.

• Compare and contrast the different types of drugs used on a drug eluting stent.

• Define and discuss the uses of distal protection devices.

• Compare and contrast the types of percutaneous transluminal coronary angioplasty.

• Define and discuss Intravascular Ultrasound.

• Define and discuss the FFR wire.

• Define and discuss Intra-Aortic Balloon Pump.

• Demonstrate the proper mixture of saline to contrast for the indeflator.

• Demonstrate the proper way to fill the indeflator.

• Demonstrate the proper amount of contrast/saline mixture to put into the indeflator.

• Demonstrate the proper way to prepare the balloon for use in an angioplasty.

• Demonstrate the proper way to prepare the stent for use in an angioplasty.

• Demonstrate helping physician insert the guide catheter\*

• Demonstrate helping physician cannulate the coronary artery with the guide catheter\*

• Demonstrate helping physician with the insertion of the coronary guide wire\*

• Demonstrate helping physician with placing the coronary guide wire across the lesion\*

• Demonstrate proper way to load balloon or stent onto the coronary guide wire\*

• Demonstrate proper way to inflate the balloon or stent\*

• Demonstrate proper way to removed balloon or stent form the patient\*

• Demonstrate proper way to removed coronary guide wire\*

• Demonstrate proper way to removed guide catheter\*

• Define and discuss peripheral artery disease.

• Define and discuss the process of diagnosing peripheral artery disease.

• Compare and contrast stable and unstable plaque.

• Compare and contrast types of lesions.

• Define and discuss the progression and symptoms of peripheral artery disease.

• Compare and contrast the treatment for peripheral artery disease.

• List and explain the equipment needed for a percutaneous transluminal angioplasty.

• List and explain the steps in a percutaneous transluminal angioplasty.

• Compare and contrast the types of percutaneous transluminal angioplasty.

• Define and discuss femoral artery wall puncture.

• Compare and contrast a high and low puncture of the femoral artery.

• Define and discuss arterial hemostasis.

• Compare and contrast methods of achieving arterial hemostasis.

• Compare and contrast the types of closure devices.

• List and explain the difference between internal and external closure devices.

• List and explain the difference between intravascular and extravascular closure devices.

• Define and discuss the function and purpose of a Femostop.

• Demonstrate in a lab setting the proper steps for an angioplasty.

\* Students will demonstrate competency of these objectives using the Vist simulator.

**V. 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. 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.

**VI. REQUIREMENTS FOR THE STUDENTS:**

**VII. ATTENDANCE POLICY:**

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

**VIII. 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.)

IX. **REQUIRED COURSE MATERIALS:**

(In correct bibliographic format.)

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

Other special learning resources.

**XI. CLASS SCHEDULE:**

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

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

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

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