PHARMACOLOGY AND VENIPUNCTURE
Course Syllabus

Course Number: RADT-0198
OHLAP Credit: No
OCAS Code: None
Course Length: 18 Hours
Career Cluster: Health Science
Career Pathway: Diagnostic Services
Career Major(s): Radiologic Technologist
Pre-requisite(s):

Course Description: Content provides basic concepts of pharmacology, venipuncture and administration of diagnostic contrast agents and intravenous medications. The appropriate delivery of patient care during these procedures is emphasized.

Textbooks:


Online resources: Blackboard™

Course Objectives:

1. Distinguish between the chemical, generic and trade names of various drugs.
2. Describe the pharmacokinetic, pharmacodynamics and pharmacogenetic principles of drugs.
3. Explain the uses and impact on the patient of different categories of drugs.
4. Define the categories of contrast agents and give specific examples for each category.
5. Explain the pharmacology of contrast agents.
6. Describe methods and techniques for administering various types of contrast agents.
7. Identify and describe the routes of drug administration.
8. Demonstrate appropriate venipuncture technique.
9. Differentiate between the two major sites of intravenous drug administration.
10. Identify, describe and document complications associated with venipuncture and appropriate actions to resolve these complications.
11. Discuss the various elements of initiating and discontinuing intravenous access.
12. Differentiate and document dose calculations for adult and pediatric patients.
13. Prepare for injection of contrast agents of intravenous medications using aseptic technique.
14. Explain the current legal status and professional liability issues of the radiographer’s role in contrast and drug administration.
All objectives are taken from the ASRT (American Society of Radiologic Technologists) curriculum © 2017

Teaching Methods: The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.

Grading Procedures: 1. Students are graded on theory and lab practice and performance.
2. Each course must be passed with eighty (80%) percent or better.
3. Grading scale: A=90-100%, B=80-89%
4. Career Major grades established during coursework are a major criteria in successfully obtaining certification.

Description of Classroom, Laboratories, and Equipment: Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit: The student may be eligible to take state, national or industry exam after completion of the program. Tulsa Tech students may be able to earn college credit based on their knowledge gained at Tech. The process of earning credit through Prior Learning Assessment (PLA) will be determined after completion with Tech and based on certification, credential or knowledge of the subject. See program counselor for additional information.

College Credit Eligibility: All Tulsa Tech students (high school and adult) may have the opportunity to receive college credit upon completion of their program. Our College Relations office will work with students regarding the benefits of Prior Learning Assessments (PLA) toward an Associate of Applied Science (AAS) degree or a technical college certificate at area colleges. For more details call the College Relations office at 918.828.5000.