### Course Number: RADT-0141B
### Career Cluster: Health Science
### Career Pathway: Diagnostic Services
### Career Major(s): Radiologic Technologist

### Course Description:
Content is designed to provide the knowledge base necessary to perform standard radiographic procedures. Consideration is given to the evaluation of optimal diagnostic images.

### Textbooks:
- *Introduction to Radiologic Sciences and Patient Care, 6th Ed.* by Arlene Adler, Richard Carlton (2016)

### Online Resources
- Blackboard

### Course Objectives:
1. Describe standard positioning terms.
2. Demonstrate proper use of positioning aids.
3. Discuss general procedural considerations for radiographic exams.
4. Identify methods and barriers of communication and describe how each may be used or overcome effectively during patient education.
5. Explain radiographic procedures to patients/family members.
6. Modify directions to patients with various communication problems.
7. Develop an awareness of cultural factors that necessitate adapting standard exam protocols.
8. Adapt general procedural considerations to specific clinical settings.
9. Identify the structures demonstrated on routine radiographic and fluoroscopic images.
10. Adapt radiographic and fluoroscopic procedures for special considerations.
11. Simulate radiographic and fluoroscopic procedures on a person or phantom in a laboratory setting.
12. Evaluate images for positioning, centering, appropriate anatomy and overall image quality.
13. Discuss equipment and supplies necessary to complete basic radiographic and fluoroscopic procedures.
14. Explain the patient preparation necessary for various contrast and special studies.
15. Explain the routine and special positions/projections for all radiographic/fluoroscopic procedures.

16. Explain the purpose for using contrast media.

17. Name the type, dosage and route of administration of contrast media commonly used to perform radiographic contrast and special studies.

18. Describe the general purpose of radiographic and fluoroscopic studies.

19. Apply general radiation safety and protection practices associated with radiographic and fluoroscopic examinations.

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%, C=70-79%, D=60-69%, F=50-59%.
4. Students wanting to take advantage of college credit/alliance agreements must maintain an 80% in their coursework.
5. 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