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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Health Science |
| **Course Name** | Principles of Health Science |
| **Lesson/Unit Title** | Radiology and Medical Records |
| **TEKS Student Expectations** | **130.222. (c) Knowledge and Skills**  (5) The student assesses career options and the preparation necessary for employment in the health science industry.  (A) The student is expected to locate, evaluate, and interpret career options and employment information  (7) The student identifies the career pathways related to health science.  (A) The student is expected to compare health science careers within the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems |
| **Basic Direct Teach Lesson**  (Includes Special Education Modifications/Accommodations and  one English Language Proficiency Standards (ELPS) Strategy) | |
| **Instructional Objectives** | * Identify and explore career opportunities within the Health Science Cluster * Translate medical records * Explore, examine, and identify common bone injuries |
| **Rationale** | Students should be able to identify careers that are available to health science professionals. |
| **Duration of Lesson** | 2 days |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* |  |
| **Materials/Specialized Equipment Needed** | * Radiology Activity * Medical Records Activity * ER Assessment Activity (Extension) |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Initiate a discussion with students to see if anyone has ever broken a bone; what happened? Explain today’s lesson will look at a couple of different careers where healthcare workers work every day with patients who have had emergency injuries.  **Diagnostic Services**-*Primarily focused on detection, diagnosis and**treatment of diseases and disorders*   * Ex: Physicians, Technologists, and Technicians * Explain that radiographers must be very good in anatomy so that they can take accurate “pictures” of the body’s internal structures. Medical radiographers often x-ray bones and must be able to recognize diverse types of fractures. They work in hospitals, outpatient medical imaging centers, physicians’ offices, or mobile imaging companies producing images of the human body as an aid in the diagnosis of disease and injury.   **Health Informatics**-*Primarily focused on management of**departments, agencies, and patient data*   * Ex: Administrators, Unit Coordinators, and Clerks * Medical Transcriptionists work with every field of health care as they make sure communication and accurate records are kept for patients * Go over the basic bones of the human anatomy (see handout).   See how many they already know and teach students new ones. |
| **Direct Instruction \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Guided Practice \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | Identifying Fractures Activity   1. Explain that students will look at x-ray diagrams and determine the type of fracture pictured. Give students copies of the “Radiographer – Identifying Fractures” activity. Go over directions together and answer any questions. 2. Students may use computers and the internet to find information needed on the activity sheet.   Medical Transcriptionist Activity   1. Explain that students will translate the medical terminology in a radiology report. Give students copies of the “Medical Transcriptionist” activity. Go over directions together and answer any questions. 2. Students may use the terms list to find information needed on the activity sheet.   ER Assessment Activity   1. Explain that students will complete a patient history. 2. Students will choose one of the twelve diagnoses from the “Radiographer – Identifying Fractures” activity and explain how the patient may have injured themselves for this type of fracture. 3. Students may use computers and the internet to find common causes for this type of fracture.   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** | Review correct answers with students during the last 10 minutes of class and check for accuracy Discuss upcoming career module experiences and expectations  **Homework**: Instruct students to continue searching for vocabulary list definitions |
| **Summative/End of Lesson Assessment \*** | * Verbal responses to questions * Participation in all activities * Successful completion of “Radiographer – Identifying Fractures” Activity (Coming Soon) * Successful completion of “Medical Transcriptionist” Activity (Coming Soon)   *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/**  **Teacher Preparation** |  |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** |  |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) | * ER Assessment Activity * Research the Internet for common causes for diverse types of fractures * Create free online health record:   The Veterans Health Information Systems and Technology Architecture (VistA) |
| **Family/Community Connection** |  |
| **CTSO connection(s)** | HOSA/SkillsUSA |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)