PAS1831 Clinical Diagnostic Imaging

Course Description: The course introduces the PA student to principles of diagnostic imaging and a familiarity with the many diagnostic techniques available, their values and limitations, and how they may be best used in the management of the patient in clinical practice. Prerequisites: BSC2085/L, BSC2086/L, CHM1045/L, CHM1046/L, MCB 2010/L (1 hr. lecture) (1 hr. lecture)
Prerequisite: CHM1045L, BSC2085, BSC2086, MCB2010, MCB2010L, BSC2085L, BSC2086L, CHM1045, CHM1046, CHM1046L

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<th>Course Competency</th>
<th>Learning Outcomes</th>
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| **Competency 1:** The student will recognize imaging modalities such as Ultrasound, CT, MR, nuclear medicine and radiologic images by: | 1. Communication  
2. Critical thinking  
8. Computer / Technology Usage |
| 1. Describing the basic principles of radiographs  
2. Discriminating between the image generation process in radiographs, CT, MRI, ultrasound, and PET/CT.  
3. Describing the expected appearance of radiopaque and radiolucent materials on plain radiograph | |
| **Competency 2:** The student will compare and contrast normal and abnormal radiographic findings on conventional radiography studies, ultrasound, CT, MRI, and nuclear medicine studies by: | 1. Communication  
2. Critical thinking  
8. Computer / Technology Usage |
| 1. summarizing the relationship between radiologic findings and the patient management  
2. Discussing the most common pathologic terms systematically  
3. reading and interpreting a chest radiograph using a systematic approach  
4. evaluating the technical quality of a radiograph by assessing inspiratory effort, penetration, and rotation | |
| **Competency 3:** The student will identify common abnormal findings on radiographs using a system approach by: | 1. Communication  
2. Critical thinking  
8. Computer / Technology Usage |
| 1. describing the radiographic features of the following conditions: CHF, Asthma, pulmonary edema, COPD, pulmonary embolism, pleural effusion, pneumothorax, and pneumonia  
2. recognizing and interpreting the radiographic features of the following conditions: sinusitis, skull fractures, nasal fractures, mandible fractures  
3. recognizing and interpreting common fractures and dislocations of the hand, wrist, elbow, arm, shoulder, pelvis, hips, legs, knees, ankle and foot.  
4. Recognizing and interpreting abdominal radiographic studies | |