Objective: To provide a practical general review of X-ray equipment, essential x-ray physics and positional techniques commonly used in a practice. Upon completion the participant should be able to gain a fundamental grasp of the equipment essential in producing diagnostic X-rays as well as the basic understanding of the differences of the various technologies. A review of proper patient positioning techniques and positional caveats with examples will be presented to help the participants produce standard diagnostic views essential in most practices.

Hour 1: Reviews of the necessary equipment needed to produced diagnostic x-ray images with breakdown of the anatomy of the commons systems and it functions as well as a discussion on the differences various equipment’s.

Hour 2: Review of the minimum state requirements regarding X-ray, film processors and patient information on diagnostic studies.

Hour 3: Discussion on newer /digital technologies and how they operate to produce diagnostic images. Comparison with an emphasis on advantages and disadvantages of these newer technologies will be covered. Brief discussion on advance imaging technologies that are available and a discussion on when these technologies should be considered will be presented.

Hour 4: Presentation and discussion of the essential physics that occurs from the time x-rays are generated to the development of the latent image. Discussion on patient preparation before and when performing diagnostic X-rays.

Hour 5: A review of patient position and proper techniques used in the production of spinal x-ray imaging. With an emphasis on pointing out common errors and why it is important to correct them.
Hour 6: A review of patient position and proper techniques used in the production of upper and lower extremity x-ray imaging. With an emphasis on pointing out common errors and why it is important to correct them.