INTRODUCTION TO 12-LEAD ECG

**Course Outline**

 I. Introduction to course, registration

 II. Review of cardiac anatomy and function

 A. Mechanical

 B. Electrical

 C. Coronary arteries

 III. Introduction to lead concepts

 A. Frontal plane (limb) leads

 B. Horizontal plane (chest) leads

 C. Reciprocal leads

 D. QRS direction, height, and width

 E. Basic axis determination

 IV. The normal 12-lead ECG

 A. Features of the normal ECG

 B. 12-lead ECG vs. monitoring

 C. Electrode placement

 D. Obtaining a good quality tracing

 V. ST elevation M.I.

 A. Anterior wall M.I.

 B. Lateral wall M.I.

 C. Inferior wall M.I.

 D. Posterior wall M.I.

 E. Right ventricular M.I.

 VI. Non-ST elevation M.I. and coronary artery disease

 VII. Bundle Branch Block

 A. Left BBB

 B. Right BBB

 C. Intermittent and rate-related BBB

 D. Aberrantly-conducted premature beats

 VIII. M.I. mimics and other ECG changes

 A. Left ventricular hypertrophy with strain

 B. “Early repolarization”

 C. Pericarditis

 D. Drug and electrolyte effects

 IX. Class evaluation