LINCOLN UNIVERSITY
SPRING 2012 COURSE SYLLABUS

Course Number: **DI 125 / UT 125**
Course Title: **ECG and Arrhythmias Interpretation**
Course Credit: **4 Units** = 3 units of lecture and 1 unit of lab practice
                   (45 lecture hours + 30 lab hours)
Prerequisite: **DI 30 / UT 30 or equivalent**
Instructors: **Chris Nguyen, Ph.D. & Frank Porter**

COURSE DESCRIPTION
Students will learn the principles and procedures of 12-lead electrocardiography (ECG), arrhythmia interpretation and care, maintenance of equipment and exam area.

This course introduces Electrocardiography principles and instrumentation. Topics include Basic ECG waves, Normal ECG, Abnormal ECG, Arrhythmias, ECG interpretation. Related topics such as Patient preparation, Safety, Quality, Accuracy, and ECG Reporting are also covered.

COURSE OBJECTIVES AND STUDENT LEARNING OUTCOMES
Upon satisfactory completion of this course, the students will be able to:
- Understand ECG principles and instrumentation
- Understand the Basic ECG waves, ECG leads, Normal ECG and Abnormal ECG
- Understand, read and interpret the following items: Electrical Axis, Axis Deviation, Atrial and Ventricular Enlargement, Ventricular Conduction Disturbances, Myocardial Ischemia and Infarction, Electrolyte Abnormalities and Metabolic Factors, Pericardial, Myocardial and Pulmonary Syndromes, Wolf-Parkinson-White Pre-excitation Patterns, Sinus Rhythm, Tachycardias and Bradycardias, Supraventricular Arrhymias, Atrioventricular Heart Block, Cardiac Arrest and Sudden Death, Pacemakers and Implantable Cardioverter-Defibrillators, etc…
- Take and interpret an ECG
- Understand and make use of Differential Diagnosis
- Understand the uses and limitations of ECG

INSTRUCTIONAL METHODS
Instructional methods will include instructor lectures and educational material presentations. Classroom activities are collective – students may and should help each other. The instructors will be available to help students with all tutorials, assignments, and Lab practices. Students are expected to attend 45 hours of lecture and 30 hours of laboratory practice.

EVALUATION
1. Homework and Quiz: Written homework assignments will be given, and additionally unannounced quizzes will be given during class time.
2. Lab Practice
3. Final Examination

GRADING SCALE

Class attendance	10%
Homework	10%
Quizzes	20%
Lab Practice	30%
Final Exam	30%
	100%

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 60	F

To successfully complete this course, the student must attend the lecture regularly, and pass the quizzes, homework, lab practice, and final exam portions with a total score of 70% or higher.

RESOURCE MATERIALS
- Clinical Electrocardiography, Ary L. Goldberger, MD (by Mosby)
- 12-Lead EKG Confidence, Jacqueline M. Green
  Anthony J. Chiaramida, MD (by Lippincott)
- ECGs Made Easy, Barbara Aehlert (by Mosby)
- EKG and Heart Murmurs, Peter Q. Warinner, MD (by Wysteria)
- Frank's
- http:/www.cardiaceps.org/

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OFFICE HOURS: Contact Dr. Chris T. Nguyen for appointment.

Revised: January 17, 2012