

**Maui Community College
Course Outline
Fall 2000**

1. Course Title: NURS 261
Advanced Electrocardiogram Interpretation
- Number of credits: One (1)
- Abbreviated Course Title: Adv ECG Interp
- Date of Outline: August 20, 2000
2. Course Description: Develops advanced nursing theory related to interpretation of 12-lead ECG.. Focuses on ECG changes which occur with acute coronary syndrome, myocardial infarction, axis deviation, artificial pacemakers, defibrillation and cardioversion..
3. Contact Hours Per Week: One (1) Lecture, on-line, as needed
4. Prerequisites: Previous or concurrent enrollment in NURS 259.
- Corequisites: None
- Recommended Preparation: None
5. General Course Objectives: Focuses on the knowledge and skill needed by nurses providing care for cardiac clients in coronary, intensive care or emergency units. Develops advanced knowledge 12 lead electrocardiogram interpretation.

8/20/00

Approved by _____ Date _____

6. Specific Course Competencies:
Upon completion of this course the learner will:
1. Delineate the electromechanics of the cardiac muscle.
 2. Evaluate 12-lead Electrocardiograms and identify abnormalities.
 3. Describe the ECG changes which occur with acute coronary syndrome and myocardial infarction and identify surface area involved.
 4. Identify ECG changes indicating myocardial ischemia and describe appropriate therapeutic actions.
 5. Describe the ECG changes that occur with axis deviation and indicate origin of these changes.
 6. Describe ECG changes which occur with electrical stimulation therapies; including artificial pacemakers.
 7. Evaluate pacemaker function and describe therapeutic management of pacemaker complications.
 8. Discuss defibrillation and cardioversion as treatment modalities.
 9. Utilize on-line computer technology to access information, collaborate with colleagues, and complete evaluation procedures.

7. Recommended Course Content

- 1 week: Introduction, Course Requirements, Cardiac Conduction System
- 1 week: Electromechanics of Cardiac Muscle
- 1 week: Obtaining a 12-Lead ECG, Normal 12-Lead ECG
- 1 week: Normal Axis & Axis Deviation
- 1 week: Acute Coronary Syndrome
- 1 week: Diagnosis of Myocardial Infarction
- 1 week: Complications and Treatment for Myocardial Infarction
- 1 week: Arrhythmogenesis
- 1 week: Bundle Branch Block & Hemiblock
- 1 week: Preexcitation Syndromes and ECG Interpretation
- 1 week: Electrical Stimulation- Pacemakers
- 1 week: Electrical Stimulation-Defibrillation, Cardioversion, & Ablation
- 1 week: Chamber Enlargement
- 1 week: Advance Cardiac Life Support
- 1 week: Evaluation

8. Recommended Course Requirements

- On-line discussion of ethical issues and clinical situations
- On-line quizzes
- Mid-term Examination
- Final Examination

9. Text and Materials

An appropriate text (or texts) and materials will be chosen at the time the course is offered. Examples:

Text: Conover, Mary Bourdreau: Understanding Electrocardiography, C.V. Mosby Company, St. Louis, 1996.

Materials: WEBCT Course, Internet sites, and on-line materials provided by the instructor

10. Evaluation and Grading

Factors for grading may include, but are not limited to, the following:

- Weekly on-line quizzes 40%
- Mid-Term Exam-25%

Final Examination 30%
On-line discussion and postings 5%

11. Methods of Instruction

Instructor Lectures via Cable TV
Guest lecturers via Cable TV
Audio, visual, or computer presentations
On-line quizzes
On-line chat and e-mail