

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Approval Date: 11/20/06

New Course OR Existing Course

Instructor(s)/Author(s): Matthew F. Powers

Subject Area/Course No.: EMS-017

Units: 1.0

Course Name/Title: Intro to EKG Arrhythmias

Discipline(s): Emergency Medical Services (EMS), Nursing, Cardiovascular Technology

Pre-Requisite(s):

Co-Requisite(s):

Advisories: Eligibility for ENGL-100

Catalog Description:

This course provides the skills and knowledge necessary to correctly interpret basic readings from an EKG, ECG or cardiac monitor. It includes a study of cardiac anatomy and physiology as well as essential medical terminology. Approved for BRN credit (00209).

Schedule Description:

This course is designed for students in health related professions desiring the knowledge to interpret single lead electrocardiograms. This course will provide concepts in the interpretation of electrocardiograms to include an understanding of the electrical conduction system of the heart as well as the identification of all categories of arrhythmias. Upon course completion, students will be able to identify various types of cardiac rhythms. Healthcare Provider CPR Certification is required at first class meeting.

Credit Credit Degree Applicable (DA)
 Credit Non-Degree (NDA)
(If Non-Credit desired, contact Dean.)

Grading Credit/Non-Credit (CR/NC)
 Letter (LR)
 Student Choice (SC)

Repeatability 0
 1
 2
 3

Hours/Mode of Instruction: Lecture 18 Lab 6 Composition _____ Activity _____ Total Hours 24
(Weekly hours) *(Total for course)*

Meets the Following Competency/Graduation Requirement(s):

Please apply for:

Transfer to: CSU UC IGETC CAN Number _____ CAN Sequence Number _____

Course is Baccalaureate Level: Yes No

Signatures:

Department Chair _____	Date _____
Librarian _____	Date _____
Dean/Sr. Dean _____	Date _____
Curriculum Committee Chair _____	Date _____
President/Designee _____	Date _____
CCCCD Approval Date (Board or Chancellor's Office) _____	Date _____

FOR OFFICE OF INSTRUCTION ONLY. DO NOT WRITE IN THE SECTION BELOW.

Begin in Semester Summer 2007

Dept. Code/Name EMS-L6002

ESL Class: No

- Class Code
- A Liberal Arts & Sciences
 - B Developmental Preparatory
 - C Adult/Secondary Basic Education
 - D Personal Development/Survival
 - E For Substantially Handicapped
 - F Parenting/Family Support
 - G Community/Civic Development
 - H General and Cultural
 - I Occupational Educational

Catalog year 2007/2008

T.O.P.s Code: 1250_00

DSPS Class: No

- SAM Code
- A Apprenticeship
 - B Advanced Occupational
 - C Clearly Occupational
 - D Possibly Occupational
 - E* Non-Occupational
 - F Transfer, Non-Occupational
 - *Additional criteria needed*
 - 1 One level below transfer
 - 2 Two levels below transfer
 - 3 Three levels below transfer
 - 3+ Four levels below transfer

Class Max: 30

Crossover course 1/ 2: _____

Coop Work Exp: No

- Remediation Level
- ES Elementary and Secondary Basic Skills
 - P Pre-collegiate Basic Skills
 - B Basic Skills
 - NBS Not Basic Skills

Course approved by Curriculum Committee as Baccalaureate Level: Yes / No

Distribution: Original: Office of Instruction

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Copies: Admissions Office, Department Chairperson

Rev 8-2006

Institutional Student Learning Outcomes

Implementation date: Spring 2007

The development of institutional SLOs is overseen by the Teaching and Learning Project in collaborations with the General Education Committee, the Occupational Education Committee, the Developmental Education Program, the Student Services Advisory Committee, and the faculty and staff representing the Library & Learning Support Services.

Check the institutional student learning outcomes (or category of outcomes) below that are reflected in your course:

- General Education SLOs (Recommended by GE Committee)**
At the completion of the LMC general education program, a student will:
1. Read critically and communicate effectively as a writer and speaker.
 2. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
 3. Think critically and creatively
 4. Consider the ethical implications inherent in knowledge, decision-making and action.
 5. Possess a worldview informed by diverse social, multicultural and global perspectives.
- (Each of the above student learning outcomes for the general education program has a written explanation with illustrations and examples of its application within courses, as well as specific assessment criteria. Consult the GE program information pages.)
- Occupational Education SLOs (Recommended by Occupational Education Committee)**
At the completion of the LMC occupational certificate or degree, a student will:
1. Be academically prepared to **obtain an entry-level or a mid-level position** in their industry.
 2. Apply **critical thinking** to research, evaluate, analyze and synthesize information.
 3. Demonstrate strong **communication skills** (written and/or oral) and **interpersonal skills** (customer service and team work).
 4. Appropriately apply **industry materials and technology**.
 5. Demonstrate the skills and knowledge necessary to take and pass **certification exams** for career **advancement** in their industry.
- (Individual certificates or degree programs in occupational education may adopt some or all of these SLOs. Please check all those that apply to this course.)
- Developmental Education SLOs (Recommended by Developmental Education Committee)**
At the completion of the LMC Developmental Education Program, a student will:
1. Demonstrate the skills necessary for the first transfer level courses in English and Math or for the English and Math competencies for the Certificate of Achievement.
 2. Think critically to construct meaning and solve problems.
 3. Read with comprehension.
 4. Communicate effectively both in writing and orally.
 5. Demonstrate the characteristics, habits, and attitudes of an effective learner.
- Student Services SLOs**
(SLOs are currently being developed)
- Library and Learning Support Services SLOs**
(SLOs are currently being developed)
- None of the Above**

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Program-Level Student Learning Outcomes (PSLOs)

Students graduating from the Emergency Medical Services Department can graduate with an A.S. Degree or with one or more certificate options—Certificate of Completion: Emergency Medical Technician I or Emergency Medical Technician Recertification.

By the end of any of these certificates or degree, the student will:

1. Be academically prepared to **obtain an entry-level position** in the Emergency Medical Services industry.
2. Demonstrate the skills and knowledge necessary to take and pass the **National Registry EMT exam**, as well as entry level exams for Paramedic Programs.
3. Apply **critical thinking** to research, evaluate, analyze & synthesize EMS related information.
4. Demonstrate excellent **communication skills** (oral and/or written) as well as excellent manipulative skills in an EMS field related environment.
5. Demonstrate knowledge of EMS industry manipulative skills and equipment, and ability to apply the skills necessary to succeed in the EMS industry.

Course-Level Student Learning Outcomes (CSLOs): What abilities will the student have at the end of this course?

By the end of this course, the student will be able to:

- 1) Discuss and explain the electrical system of the heart.
- 2) Demonstrate the safe and correct use of cardiac monitoring equipment.
- 3) Identify and interpret eighteen (18) non-life threatening and life threatening arrhythmias.
- 4) Differentiate the human physiological affects in accordance with each arrhythmia.

Course Outline of Record

Los Medanos College 2700 East Leland Road Pittsburg CA 94565 (925) 439-2181

Course Title: Intro to EKG Arrhythmias Subject Area/Course Number: EMS-017

Assessment Criteria: How will the student demonstrate these abilities?

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Assessments: What instruments will be used to assess student learning outcomes? (Eg. Tests, papers, projects, assignments etc.)

Textbook Chapter Reviews/Self Tests	(CSLO # 2)
Final Exam	(CSLO # 4)
Final Arrhythmia Practical	(CSLO # 4)

Method of Evaluation/Grading: Explain how "the course provides for measurement of student performance in terms of stated course objectives", Title V. (LMC calls "objectives", CSLOs.)

Completion of Textbook Chapter Reviews/Self Tests	40%
Class Participation/Team work	20%
Final Exam	20%
Final Arrhythmia Practical	20%
Total	100 %

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

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Course Content:

Lecture:

Introduction/Orientation to Course	30 minutes
Cardiac Pathophysiology/Electrical System	2 hours
EKG Strip/Paper Dynamics/Measurement	1 hour
Sinus Rhythms	2 hours
Atrial Rhythms	1 hour
Junctional Rhythms	1 hour
Ventricular Rhythms	2 hours
AV Block Rhythms	2 hours
Escape Rhythms	1 hour
Treatment of Lethal Rhythms	1 hour
Human Physiological Affects	2 hours
Cardiac Monitor Safety	1 hour
Cardiac Rhythms Comprehensive Review	1 hour
Final Exam	30 minutes

Lab:

Application of electrodes	30 minutes
Identification of rhythms with rhythms generator	1 hour
Group rhythm teaching	2 hours
Actual patient rhythm identification	2.5 hours

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

Required Rhythms:

- Normal Sinus Rhythm
- Sinus Arrhythmia
- Sinus Bradycardia
- Sinus Tachycardia
- Atrial Fibrillation
- Atrial Flutter
- First Degree Block
- Second Degree Block Mobitz I
- Second Degree Block Mobitz II
- Third Degree Block
- Asystole
- Agonal
- Ventricular Fibrillation
- Ventricular Rhythm
- Junctional Rhythm
- Supraventricular Tachycardia
- PVC's
- PAC's

Course Outline of Record

Los Medanos College

2700 East Leland Road

Pittsburg CA 94565

(925) 439-2181

Course Title: Intro to EKG Arrhythmias

Subject Area/Course Number: EMS-017

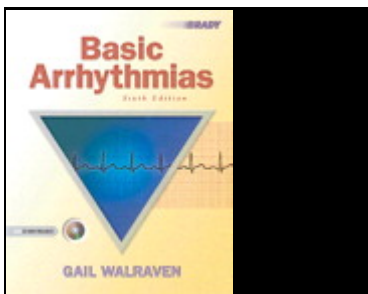
Instructional Methods: Check all the instructional methods that will be used in teaching this course. Keep in mind that the method of instruction and activities should relate to the CSLOs.

- Lecture
- Lab
- Activity
- Problem-based Learning/Case Studies
- Collaborative Learning/Peer Review
- Demonstration/Modeling
- Role-Playing
- Discussion
- Computer Assisted Instruction
- Other (explain) _____

Textbooks: Indicate name of text (or list of text choices), author, publisher and date of publication. For degree applicable courses, text should be **College Level**. Include sample pages and the contents page of the instructor designed module if it is the only text.

Required Text: Basic Arrhythmias

Author: Gail Walraven, Sixth Edition



Gail Walraven

ISBN: 0-13-117591-2

Publisher:

Prentice Hall

Copyright: 2006

Format: Paper;

688 pp