



Course Prefix/Number/Title: EMS 220 – Cardiac Emergencies I

Number of Credits: 2 Credits

Course Description: This course prepares to student to distinguish between the electrical and mechanical function of the heart and understand how cardiac impulses are formed. Also, understand the heart's electrical conduction system and what influences the rate of the cardiac impulse formation. Identify single and multi-lead cardiac rhythms.

Teaching-learning methods in this course may include, but are not limited to, assigned readings, independent studies, presentations, discussion, critical thinking exercises, labs and class activities.

Pre-/Co-requisites: EMS 214

Course Objectives: To integrate anatomy, pathophysiology, electrophysiology and rhythm recognition into the patient assessment.

Instructor: Wayne Fahy, Mary Jund and Karen Fritel

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Office Hours: By appointment

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Lecture/Lab Schedule: Monday and Thursday from 6:15-10:15 PM and 2 weekend day sessions. See class schedule.

Textbook(s): Aehlert, Barabara J. (2018). ECGs Made Easy, 6th Edition. St. Loius, Missouri, Elsevier.

Course Requirements: Students will be required to attend class and complete exams in EMStesting on time. Final exams will be worth 40%, additional tests 20%, quizzes 20%, homework 10% and affective behavior 10%. All final course grades will be calculated on a weighted grading system. Assignments, quizzes and other tests will be graded based on the scale below:

A 90- 100 B 80- 89 C 70- 79 D 60- 69 F < 59

Students will also be required to pass skill sheets and scenario skills sessions per portfolio requirements (where applicable). Please see DCB Paramedic Handbook for full grading and course requirements.

Tentative Course Outline: ECGs Made Easy, 56th Edition, Chapters 1-10.

TOPIC - CLASSROOM

ECGs Made Easy, 6th Edition, Chapters 1- 10

Anatomy and Physiology	Ch. 1
Basic Electrophysiology	Ch. 2
Sinus Mechanisms	Ch. 3
Atrial Rhythms	Ch. 4
Junctional Rhythms	Ch. 5
Ventricular Rhythms	Ch. 6
Atrioventricular Blocks	Ch. 7
Pacemaker Rhythms	Ch. 8
Introduction to the 12-Lead ECG	Ch. 9
Post Test	Ch. 10

Course objectives details to be covered according to the EMS National Standards instructional guidelines.

General Education Competency/Learning Outcome(s) <u>OR</u> CTE Competency/Department Learning Outcome(s): Students will apply knowledge gained in the didactic component of the program to achieve a minimum of 70% proficiency in all of the following curricular levels of EMS Testing exams: 1) airway management, 2) medicine, 3) EMS operations, 4) assessment, 5) preparatory, 6) special patient populations and 7) shock/resuscitation/trauma.

Relationship to Campus Theme: The goal of the Paramedic Program is to prepare professionals to work in the emergency medical services industry. The Paramedic Program is committed to a hands-on learning environment and uses field experiences and emerging technologies in emergency medical services as common instructional techniques.

Classroom Policies: Dakota College at Bottineau Paramedic Program guides.

Student Email Policy: Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity: According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs: Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services within the first two weeks of the semester to line up accommodations.

Title IX: Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the

College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX Webpage.