# Hagerstown Community College OFFICIAL MASTER SYLLABUS DOCUMENT

**COURSE: EMS 165 Pharmacology and Cardiology** 

INSTRUCTOR: Bev Witmer SEMESTER/YEAR: Fall 2017

#### **COURSE DESCRIPTION:**

Prerequisite: EMS 180(4 credit) This bridge course presents the ECG interpretation, assessment, and management of patients with cardiovascular emergencies and the pharmacological administration needed for the EMT-I to transition to EMT-P. ACLS certification included. Course fee required. Total of 60 hours of lecture.

**TEXTBOOK**: 2013 Pearson. <u>Transition Series</u>: <u>Topics for the Paramedic</u>, Hagerstown Community College Pharmacology Manual. (Will be given to you in class)

## STUDENT LEARNING OUTCOMES:

- Explain the importance of pharmacokinetics, absorption, biotransformation, elimination, half-life, accumulation, and pharmacodynamics in terms of the effects of a given drug on the body.
- Relate the anatomy and physiology of cardiovascular disease system to cardiac rhythm generation and to the pathophysiology and assessment of patients with cardiac disorders.
- Explain the importance of obtaining a good medication history from patients including prescription medications, OTC, vitamins, herbal medications, and folk remedies and other cultural medicines.
- Describe the characteristics of drugs used to affect the cardio vascular system
- Adapt the scene size-up, primary assessment, patient history, secondary assessment, and use of monitoring technology to meet the needs of cardiac patients
- Use a process of clinical reasoning to guide and interpret the patient assessment and management process for patients with cardiac and vascular disorders.
- Demonstrate applied knowledge of Maryland State Drug Protocols for dysrhythmias and cardiovascular complaints
- Explain the legal regulations that apply to mediations, including the schedule of controlled medications.
- Explain how key drug legislation applies to the paramedic's role in administering drugs.
- Demonstrate the safe administration of medications allowed in your scope of practice under the supervision of a lab instructor or clinical preceptor, including medications administered by percutaneous, pulmonary, enteral, and parenteral routes.
- Explain the paramedic's roles and responsibilities with respect to administering medications.

**COURSE WORKLOAD:** Each 4 credit course requires a total of 150 hours of instructional time/student work. The course will have 50 hours of instructional time and 100 hours will account for student work outside of instructional time. The average is 6.67 hours per week of student work.

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#### **COURSE CONTENT OBJECTIVES:**

- Explain the electrophysiological basis of cardiac function.
- Explain the etiology and treatment of various cardiovascular diseases from the paramedic's perspective.
- Be certified in ACLS
- Demonstrate the pharmacological administration of approved paramedic medications.

**ASSESSMENT PROCEDURES:** The final grade for the course will be based on four areas. The average for moodle assignments, Final Exam, and participation/attendance will be determined on a straight point system and weighted with the following scale. The instructor reserves the right to deduct points for assignments completed late. Quiz and test material can cover any information presented in the assigned readings or in the lecture.

Cognitive: 60%
Quizzes 30%
Forum 20%
Midterm 20%
Final Exam 30%
Psychomotor: 20%
Skills (minimum of 70% to Pass) P/F
Case Studies
Affective Domain: 20%
AD Midterm 20%
AD Final 20%
Attendance and Participation 60%
Thursday Lab 50%
Participation 50%

# **Course Grading:**

A: 90% and above B: 80% - 89.9% C: 70% - 79.9% D: 60% - 69.8% F: Below 60%

<u>Quizzes:</u> Quizzes and online assignments given over the semester will be based upon the assigned reading, handouts, and lectures.

<u>Final Exam</u>: The exam is comprehensive. The final will account for 30% of the grade. The exams will be offered in the HCC Testing Center located in the LRC and further information will be given at the appropriate time.

<u>Participation/Attendance</u>: Participation and attendance will be evaluated each class. Active participation in class discussion, projects and group work is required for full participation credit. Excused and Unexcused absences will be determined by instructor. (See attendance policy below.)

<u>Moodle:</u> Is HCC's Learning Management System. Each course in the Paramedic Emergency Services Program will be using this LMS to share files, quizzes, exams, gradebook, and other useful resources. It is your responsibility to check in to Moodle daily and complete assignments. Firefox or Chrome is the best platform to use. Internet Explorer does not allow all the features to be used.

## Program Requirements:

- A Minimum grade of 70% in each paramedic course
- A Minimum of 70% on the final in each course
- A mark of satisfactory for both the laboratory skills and clinical experiences. Students who receive a final mark of unsatisfactory in the clinical laboratory or clinical experience, despite a passing theory grade, will not be permitted to progress in the paramedic program and will receive a final grade of "F" for the course.
- Competent Evaluation of the Affective Domain Criteria.
- A Minimum of 70% on an Exit Exam at the end of the program

### **COURSE POLICIES:**

#### Attendance Policy:

Students are expected to attend all regularly scheduled classes. Attendance will be taken at the start of each class. Late arrivals and early exits are rude and disturbing to the concentration of others. An attendance of a half a class will result in a marked absence unless otherwise discussed with the instructor. Absences, even for excusable reasons create stress for the student and the instructor and are the number one reason for poor achievement in this course. However it is very important to understand that you should not come to class if you are ill. Students will be allowed one unexcused absence/tardy per semester that will not count against their course attendance grade.

<u>Excused absences:</u> personal illness with a Dr. note, illness of immediate family with a Dr. note, mandatory work related event, mandatory military training, death of immediate family member, or other instructor approved event.

Unexcused absences: any event that does not meet above criteria or approved by instructor. All unexcused absences will result in 5 point deduction for each occurrence on Final Grade of the course.

<u>Unexcused Late arrivals or early exits:</u> Excused late arrivals or early exits will be determined by the instructor. Unexcused will count as a 2.5 point deduction for each occurrence on Final Grade. \*\*\*ALL absences excused or unexcused will result in an alternative assignment chosen by the instructor to make up the missed material. This assignment is due at the next class session. The quality of the assignment will be graded. All incomplete or poor quality will result in an additional 2 point deduction on Final Grade. \*\*\*

Inclement Weather Policy: The Instructor follows the College's inclement weather decisions. In other words is the college is open the class will be held. Students may choose not to attend due to weather conditions but must notify the instructor according to the attendance policy.

#### **HONOR CODE:**

"I promise to uphold the Hagerstown Community College Honor System and to understand all written provisions pertaining to its application. As a member of the college community, I hold the qualities of honesty and integrity in highest regard and will not violate them or tolerate those who do."

## **Prohibited Conduct:**

Academic integrity violations include but are not limited to the following types of conduct:

- A. Cheating on placement tests, exams, tests, and quizzes. Examples of cheating include but are not limited to: 1) giving or accepting unauthorized exam material or using illegitimate sources of information, 2) dishonestly obtaining copies of an exam or providing or receiving information about an exam, 3) exchanging information during an exam or copying from another's paper, 4) using "crib sheets" or any other unauthorized aids including all electronic retrieval devices or materials during an exam, and 5) taking an exam in the name of someone else
- B. Plagiarism is the use of ideas or work of another without sufficient acknowledgment that the material is not one's own. Examples of plagiarism include 1) submitting material created by another as one's own work or including passages of another author without giving due credit and 2) submitting purchased material, in any form of communication, as one's own work.
- C. Computers should be used for academic purposes only. Examples of misuse of computers include:
- 1) illegal copying of commercial software or data protected by copyright or special license,
- 2) unauthorized access to computer files, 3) copying/pasting, in any form, another student's exam or homework files and submitting as one's own, 4) planting viruses on local or network drives, and
  - 3) sharing one's own or using the account number of another to access the system.
- D. Unauthorized collaboration with other individuals in the completion of course assignments.
- E. Using fraudulent methods in laboratory, studio, special projects, or field work.
- F. Intentionally or knowingly helping or attempting to help another student violate any provision relating to academic integrity.

### **CONTACT INFORMATION:**

**SERVICES FOR STUDENTS WITH DISABILITIES:** Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.

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