Course Title: EMS 165 Pharmacology and Cardiology

Program Team: Bev Witmer

Expected 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 cardiovascular 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 medications, 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.

Assessment (How do or will students demonstrate achievement of each outcome?)

<table>
<thead>
<tr>
<th>Skills</th>
<th>Pass/Fail</th>
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</thead>
<tbody>
<tr>
<td>Moodle Assignments</td>
<td>= 50%</td>
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<tr>
<td>Final Exam</td>
<td>= 50%</td>
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</tbody>
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Validation (What methods have you used or will you use to validate your assessment?)

Students must pass each course with a 70% or greater, receive satisfactory marks in laboratory/clinical skills and affective domain in order to continue with program.

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

5/8 students obtained 70% or higher

Follow-up (How have you used or how will you use the data to improve student learning?)
Evaluation of exam scores and NREMT certification results will be used to evaluate outcomes success and the need for course revisions and/or additional resources.

**Budget Justification** (What resources are necessary to improve student learning?)

To be determined in Spring of 2014.