**SYSTEM: Cardiopulmonary**  
**CONDITION: General foundational science**  
(BOLD content unlikely to be covered elsewhere in the curriculum)

<table>
<thead>
<tr>
<th>Content</th>
<th>Educational Objectives</th>
<th>Level of Mastery*</th>
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| Anatomy | • Knowledge of the anatomical structure and function of the cardiopulmonary system  
• Specific structures of the cardiopulmonary system as related to the musculoskeletal system and PT practice |  
• Describe anatomy of the cardiopulmonary system  
• Communicate the functional relationships of the musculoskeletal structures to the cardiopulmonary system | P  
P |
| Physiology | • Normal Physiological function of the cardiopulmonary system  
• Interaction of the cardiopulmonary system with the neuromusculoskeletal system |  
• Describe normal function of the cardiopulmonary system  
• Discuss inter-relationships of the cardiopulmonary system to neuromusculoskeletal systems in patient friendly language  
• Discuss mechanism related to various cardiopulmonary system conditions and consequences to health and function  
• Discuss application of diagnostic criteria for cardiopulmonary system dysfunction | P  
P  
P  
P |
| Pathophysiology | • Common pathologic conditions of the cardiopulmonary system  
(e.g. coronary artery disease, congestive heart failure...)  
• Incidence and prevalence of cardiopulmonary system disorders  
• Diagnostic criteria for common pathophysiologic conditions  
• Cardiopulmonary changes in women related to hormonal changes throughout the lifespan |  
• Explain the pathology of heart and lung disease including secondary effects on various systems  
• Discuss mechanism related to condition and consequences to health and function  
• Discuss application of diagnostic criteria for common cardiopulmonary dysfunctions  
• Recognize the impact of affective co-morbidities on the cardiopulmonary system  
• Discuss inter-relationships of cardiopulmonary system to neuromusculoskeletal system in patient friendly language | F  
F  
P  
F |
| Exercise Science | • Impact of physiologic changes of exercise on cardiopulmonary system function |  
• Plan modifications to exercise interventions required by the cardiopulmonary system dysfunction including considerations for joint safety and energy conservation | P |
| Pharmacology | • Medications used to treat common cardiopulmonary system conditions |  
• Utilize resources to assess impact of medications used to improve the cardiopulmonary system on physical therapy intervention | F |

* F = Familiar; P = Proficient; M = Mastery