

PHYSIOLOGY AND PHARMACOLOGY (PHYPM)

PHYPM 1116. Medical Physiology. (6 Credit Hours)

This course introduces basic principles of medical physiology from the molecular and cellular levels to the organ systems. Emphasis is placed on regulatory control mechanisms that are necessary to understand body homeostasis and pathophysiology and to conceptualize disease processes and rationales for therapeutic interventions. Understanding physiology is the foundation for pharmacology, pathology and clinical disciplines. A firm background in anatomy and biochemistry is essential for mastery of physiology. Prerequisite courses strictly apply to MSBS and MSA students.

Prerequisites: *BIOC 1112, BIOC 1102, or BIOC 1103*

PHYPM 2086. Special Topics in Pain Management. (1 Credit Hour)

This course will introduce specific topics in pain physiology, pain pharmacology and clinical management of different pain conditions. Students will continue their studies in advanced concepts of pain neurobiology, use of different analgesic agents, overdose epidemic, best clinical practices currently used in pain management, as well as pathways to a specialty in pain management and/or addiction medicine.

PHYPM 2115. Medical Pharmacology. (5.5 Credit Hours)

This course introduces the basic principles of medical pharmacology. The course will provide a foundation in the areas of general pharmacological concepts such as pharmacokinetics, pharmacodynamics, and pharmacogenomics - which are relevant to all therapeutic and toxic agents. Additionally, topics relevant to specific drug classes such as clinical utility, mechanisms of action, and adverse effects will be presented in each unit.