A. Course Description

Credits: 6

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week:

MnTC Goals: None

This course continues the in-depth analysis of the body systems relevant to the science and practice of anesthesia. Topics include respiratory, endocrine, and excretory systems. Competence Statement: Knows the fundamental physiology and pathophysiology of the respiratory, endocrine, and excretory systems.

B. Course Effective Dates: 01/14/2019 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Describe normal anatomy and physiology of the respiratory system, examine the effects of respiratory disease and anesthesia on pulmonary function, and illustrate concerns regarding the anesthetic management of patients with respiratory disease.
2. Describe normal anatomy and physiology of the kidney, examine the effects of renal disease and anesthesia on kidney function, illustrate concerns regarding anesthetic management of patients with renal disease, describe mechanisms responsible for fluid-electrolyte and acid-base balance, and examine the consequences of fluid-electrolyte and acid-base disorders. Describe the physiology of thermoregulation.
3. Describe normal anatomy and physiology of the endocrine system, examine the systemic effects of endocrine diseases, and illustrate concerns regarding the anesthetic management of patients with endocrine diseases.
4. Describe normal anatomy and physiology of the liver and gastrointestinal system, examine the pathophysiology of liver disease and the effects of anesthesia on liver function, and describe physiology of the immune system.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Restrictions: Admission into the Minneapolis School of Anesthesia program.