COLLEGEWIDE COURSE OUTLINE OF RECORD

APHY 102, ANATOMY AND PHYSIOLOGY II

COURSE TITLE: Anatomy and Physiology II

COURSE NUMBER: APHY 102

PREREQUISITES: APHY 101, Anatomy and Physiology I and demonstrated competency through appropriate assessment or earning a grade of "C" or better in MATH 023 Essentials of

Algebra I or MATH 080 Mathematics Principles with Algebra

SCHOOL: Liberal Arts and Sciences

PROGRAM: Liberal Arts CREDIT HOURS: 3

CONTACT HOURS: Lecture: 2 Lab: 2

DATE OF REVISION: Fall, 2011

EFFECTIVE DATE OF THIS REVISION: Fall, 2014

CATALOG DESCRIPTION: Continues the study of the inter-relationships of the systems of the human body. Introduces students to the study of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

- 1. List the basic requirements of the human body to sustain life.
- 2. Describe the structural hierarchy and levels of organization of the human body.
- 3. Describe the structure and function of the human organ systems.
- 4. Communicate in anatomical, directional, and medical terminology.
- 5. Explain the relationship of anatomy and physiology to basic health and pathology.
- 6. Identify and describe the structure, function, location, and secretions of the endocrine glands.
- 7. Identify and describe the formation, composition, functions, and types of blood.
- 8. Identify and describe the structure, function, and location of the heart and major blood vessels.
- 9. Identify and describe the structure, pathways, and function of the lymphatic system.
- 10. Identify and describe the structure and function of the respiratory system.
- 11. Identify and describe the structure and function of the digestive system.
- 12. Explain how nutrients function in metabolism, energy balance, and hormonal control.
- 13. Identify and describe the structure and function of the urinary system, including fluid and electrolyte balance.
- 14. Identify and describe the structure and function of the reproductive system.
- 15. Demonstrate proper use and understanding of: laboratory safety procedures; laboratory equipment such as microscopes, dissecting instruments, and physiologic instrumentation; and analyses.
- 16. Demonstrate dissection skills.

COURSE CONTENT: Topical areas of study to be covered in lecture and laboratory include:

Lecture Content:

Endocrine system

Blood

Cardiovascular System

Lymphatic System and Immunity

Respiratory system

Digestive system

Urinary system/fluid, electrolytes and pH

Reproductive System

Laboratory Content:

Suggested Topics/Activities:

Structure and location of endocrine glands

Hormone activities

Blood cell identification

Blood typing

Blood pressure

Anatomy of the heart, including heart dissection

Identification of major arteries and veins

Histology and models of lymphatic system

Critical thinking questions related to immunity

Anatomy and histology of the respiratory system using models, slides, and/or dissection Lung volumes

Urinalysis

Anatomy and histology of the urinary system, including kidney dissection

Anatomy and histology of the digestive system using models, slides, and/or dissection

Enzyme activities

Anatomy and histology of the reproductive system using models, slides and/or dissection

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students' on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to http://www.ivytech.edu/library/ and choose the link for your campus.

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