INTRODUCTION TO ANATOMY AND PHYSIOLOGY — BIOL 1310

A. Course Description

- Credits: 4.00
- Lecture Hours/Week: 3.00
- Lab Hours/Week: 1.00
- OJT Hours/Week: 0
- Prerequisites: None
- Corequisites: None
- MnTC Goals:
  - 03 – Natural Science

This lecture and laboratory-based course is designed for introductory study of human organ systems (integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, and urogenital) by structure and function. Cellular function, human reproduction, development, and heredity are other topics integrated into the biology of the human body. Carefully check your program requirements for acceptability of this course. It does not replace the two course sequence of anatomy and physiology required for many advanced health programs. Meets MnTC Goal 3

B. Course Effective Dates: 8/23/10 – Present

C. Outline of Major Content Areas

1. Body organization
2. Cell structure and function
3. Connect their anatomical and physiological aspects to maintain homeostasis
4. How tissues relate to cells and organs
5. Identify different types of tissues in the body
6. Regional and directional terms pertaining to the human body
7. Study each of the 11 systems of the human body
8. Understand the difference between tissues physiologically and anatomically

D. Learning Outcomes

1. Communicate findings in several lab assignments
2. Develop an appreciation and knowledge of nature and the role of anatomy and physiology in human health
3. Improve group work skills
4. Improve reading, listening, writing, and speaking skills
5. Increase basic knowledge of the principles of anatomy and physiology in all 11 systems of the human body
6. Relate the importance of homeostasis in their everyday life activities for a healthy life
7. Understand how science operates
8. Understanding how to interpret scientific research and findings
9. acquire laboratory techniques and skills through practical experience
10. design lab experiment elucidating physiological concepts

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

Goal 03 — Natural Science

1. Demonstrate understanding of scientific theories.
2. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least two of the natural science disciplines. One of these experimental components should develop, in greater depth, students' laboratory experience in the collection of data, its statistical and graphical analysis, and an appreciation of its sources of error and uncertainty.
3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.
4. Evaluate societal issues from a natural science perspective, ask questions about the evidence presented, and make informed judgments about science-related topics and policies.

F. Learner Outcomes Assessment

As noted on course syllabus

G. Special Information

None noted