

# North Hennepin Community College

## BIOL 2111: Human Anatomy and Physiology I

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 3

Lab Hours/Week: 3

OJT Hours/Week: \*.\*

Prerequisites:

This course requires either of these prerequisites

BIOL 1001 - Biology I (Minimum grade: 1.67 GPA Equivalent)

BIOL 1101 - Principles of Biology I (Minimum grade: 1.67 GPA Equivalent)

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

This course is the first course of a two-course sequence. The course offers students a comprehensive study of the structure and function of the human body in a classroom and laboratory setting. Topics include anatomical terminology, homeostasis, cell structure and function, histology, as well as the anatomy and physiology of the following organ systems; integumentary, skeletal, articular, muscular, nervous, special senses and endocrine. Utilization of preserved specimens in the laboratory is a required part of the course. (3 hours lecture, 3 hours lab) Strongly recommend college level reading abilities, a working knowledge of elementary algebra and a medical terminology course. Prerequisite: Biol 1001 or 1101 with grade of "C" or better. Recommendations for student success in this class include: a prior course in medical terminology, college level reading and basic algebra skills

**B. COURSE EFFECTIVE DATES:** 08/25/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Topics will include anatomical terminology, homeostasis, cell structure and function, histology, as well as the anatomy and physiology of the following organ systems; integumentary, skeletal, articular, muscular, nervous, special senses and endocrine.

### D. LEARNING OUTCOMES (General)

1. Demonstrate knowledge of anatomy and physiology core concepts. (MnTC G2, comps. A; MnTc G3, comp a; ELOs 1, 2, 4)
2. Discuss the significance of the interrelationships of body organ systems. (MnTC G2, comp. c, MnTC G3, comps. a, b; ELOs 1, 2, 3)
3. Explain how homeostatic mechanisms apply to body functions. (MnTC G2, comp. c, MnTC G3, comps. a, b; ELOs 1, 2, 3)
4. Apply concepts of structure and function as they relate to the principle of complementarity. (MnTC G2, comp. c, MnTC G3, comps. a, b; ELOs 1, 2, 3)
5. Communicate experimental findings, analyses, and interpretations formally and informally. (MnTC G2, comp. a, b, c; MnTC G3, comps. a, b, c; ELOs 1, 2)

## **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.

## **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

## **G. SPECIAL INFORMATION**

1. Knowledge of Human Cultures and the Physical and Natural World --Through study in the sciences, mathematics, social sciences, humanities, histories, languages, the arts, technology and professions.
2. Intellectual and Practical Skills - Including: Inquiry and analysis; Critical and creative thinking; Written and oral communication; Quantitative literacy; Information literacy; Teamwork and problem solving.
3. Personal and Social Responsibility and Engagement - Including: Civic knowledge and involvement - campus, local and global; Intercultural knowledge and competence; Ethical reasoning and action; Foundations and skills for lifelong learning.
4. Integrative and Applied Learning - Including: Synthesis and advanced accomplishment across general education, liberal studies, specialized studies and activities in the broader campus community