

ROCHESTER COMMUNITY COLLEGE

COMMON COURSE OUTLINE: Course discipline/number Biology 1107

A. CATALOG DESCRIPTION (include prerequisites)

Course Title: Fundamentals of Anatomy & Physiology
Credits: 4
Hours/Week: 3 hours lecture and 2 hours lab per week
Semesters Offered: One semester per year
Prerequisites: None

This course meets the requirements for the Minnesota Transfer Curriculum in CT (Critical Thinking) and NS (Natural Sciences).

This course is a one-semester study of Human Anatomy and Physiology. Special emphasis on understanding vocabulary and terminology is made. Appropriate combining forms, prefixes and suffixes will be learned as each of the component body systems is studied. The course deals with clinical procedures, practical applications and pathology. Analysis of current health care and related social issues will be discussed. Laboratory sessions will correlate to lecture material and will include microscope work, computer work as well as dissection of animal specimens.

B. DATE LAST REVISED (use current date): May 1997

C. RECOMMENDED ENTRY SKILLS/KNOWLEDGE:

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Introduction of human anatomy and physiology
2. Terms pertaining to the body as a whole
3. Suffixes and prefixes
4. Digestive system
5. Urinary system
6. Male and female reproductive systems
7. Nervous system
8. Cardiovascular system
9. Respiratory system
10. Blood system
11. Lymphatic and immune systems
12. Musculoskeletal systems
13. Integumentary system
14. Sense organs: The eye and the ear
15. Endocrine system

E. LEARNING OUTCOMES (GENERAL):

1. Vocabulary
2. Anatomy and histology of these body systems
3. Physiological principles
4. Complementarity of anatomy and physiology of the systems studied
5. Application of the knowledge to human conditions

F. LEARNING OUTCOMES (MNTC):

Critical Thinking

- a. Gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.
- b. Imagine and seek out a variety of possible goals, assumptions, interpretations or perspectives which can give alternative meanings or solutions to given situations or problems.
- c. Analyze the logical connections among the facts, goals, and implicit assumptions relevant to a problem or claim; generate and evaluate implications that follow from them.
- d. Recognize and articulate the value assumptions which underlie and affect decisions, interpretations, analyses and evaluations made by ourselves and others.

Natural Sciences

- a. Demonstrate understanding of scientific theories.
- b. Formulate and test hypotheses by performing laboratory experiments requiring the collection of data, its statistical and graphical analysis and an appreciation of its sources of error and uncertainty.
- c. Communicate their experimental findings, analysis and interpretations both orally and in writing.
- d. Evaluate society issues from a natural science perspective, ask questions about the evidence presented and make informed judgments about science-related topics and policies.

G. METHODS FOR EVALUATION OF STUDENT LEARNING:

Methods may include any of the following:

1. Laboratory reports and/or quizzes
2. Objective and/or subjective tests
3. Laboratory practical tests
4. Assignments
5. Essay tasks
6. Group work/projects
7. Attendance (especially laboratory attendance)

H. SPECIAL INFORMATION (fees, directives on hazardous materials, etc.):

The initial lab session explains and familiarizes the student with general safety hazards and safety equipment in the lab. During the pre-lab discussion, the hazardous characteristics of any materials used during the lab are discussed. In addition, if the lab involves any potentially infectious material, the students will be instructed on the proper use and disposal. The instructor will direct all students to wear necessary protective equipment while working with any hazardous chemicals. A copy of Material Safety Data Sheets for chemicals used is available in the lab.