

# Minnesota State University Moorhead

## BIOL 104: Human Biology

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: Goal 03 - Natural Science

Biological basis of human structures and functions with references to genetics, development, nutrition and disease. For non-science majors. MnTC Goal 3.

### B. COURSE EFFECTIVE DATES: 06/01/1995 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Doing Science and the Foundations of Life. This section will give students the opportunity to learn how to do science. Students will set up and run experiments to learn how scientists analyze and interpret data that is then reported to the public. The Foundations of Life section will explore basic chemistry and cells, both are needed components when discussing biology and understanding how everything works together.
2. Humans and Our Environment. Students will explore the structures and functions of the human body. Students will also learn how the human body systems are affected by and deal with our environment. This section will also discuss how humans affect the environment, and how that, in turn, affects humans. Some time will also be spent on nutrition and disease in this section.
3. Genetics and Evolution. Students will discover how we pass our genetic information on to our offspring, what factors affect that heredity, and the factors that affect evolution in a population. This section will also discuss human development from a zygote to an aging adult. Some time will also be spent on the heredity of diseases in this section.

### D. LEARNING OUTCOMES (General)

1. Students will be able to assess and analyze issues in human biology.
2. Students will be able to identify structures, functions, and processes of many of the human body systems.
3. Students will be able to explain the relationship between humans and the environment.
4. Students will be able to identify the processes that affect evolution in the human population, and the methods of heredity.

## **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