

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

DEPT. BIOL

COURSE NUMBER: 2201

NUMBER OF CREDITS: 4

Lecture: 3 Lab: 1 OJT: 0

### Course Title:

Human Anatomy

### Catalog Description:

Human Anatomy covers structures of the human body from the cellular to organ system level. This course includes study of the human body organization, cellular structure, tissues and the following human organ systems: integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic, respiratory, urinary, digestive, and reproductive. Laboratory exercises are designed to reinforce and support the lecture and include hands-on dissections that coincide with the organ systems covered in the lecture topics.

### Prerequisites or Necessary Entry Skills/Knowledge:

BIOL 1110 or BIOL 1115 is recommended.

## FULFILLS MN TRANSFER CURRICULUM AREA(S) :

Goal 3: Natural Sciences:  X  by meeting the following competencies:

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.

### Topics to be Covered

Survey of the Human Body and the Study of Tissues

The Integumentary System

Bone Tissues, both the axial and appendicular skeleton and joints.

Introduction to the muscular system and the axial and appendicular musculature

Nervous tissue, the spinal cord and spinal nerves, the brain and cranial nerves as well as the autonomic nervous system and visceral reflexes.

The Endocrine system

The Circulatory system components including; blood, heart, and blood vessels.
The Lymphatic system and immunity.
The Respiratory system.
The Digestive system.
The Urinary and Reproductive systems both male and female.

<b>Student Learning Outcomes</b>
Explain the organization of the human body including pronunciations of directional regional terms, planes of section, terms of movement and system-specific terms.
Describe and identify microscopic tissue sections.
Demonstrate the ability to accurately dissect and identify different structures on various species and be able to use comparative anatomy to relate those structures to the human body.
Identify the organs that are involved in each of the human organ systems and their role in the functioning of each of the systems.
Demonstrate the ability to appropriately utilize laboratory equipment, such as microscopes, dissection tools, and general lab ware.
Recall terms and facts, to describe concepts, to analyze and apply ideas, and to relate anatomical concepts to the student's everyday life.
Explain the organs that are involved in each of the human organ systems and be able to identify their role in the functioning of each of the human organ systems.
Illustrate the ability to retain knowledge from various systems and be able to incorporate them into a comprehensive plan to describe actions involving multiple organ systems to generate proper functioning of the human body.
Demonstrate the ability to use laboratory equipment properly to evaluate your individual health of various organ systems.

<b>Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></b> <b>PATHWAY IN PROGRESS</b>
Understand human anatomy to be able to advance to human physiology.
Demonstrate an understanding of anatomical terminology.
Develop laboratory techniques and skills.
Develop an understanding of the human body and be able to recognize all humans are anatomically similar.

Revised Date: 6/2021