

GRANDE PRAIRIE REGIONAL COLLEGE
UNIVERSITY TRANSFER PROGRAM

NURSING 1050 - HUMAN ANATOMY (3-16-3)^{0.0}

COURSE DESCRIPTION:

This course gives students the opportunity to gain basic knowledge of human tissues, organs, systems and body structures, the related terminology and how these structures relate to function. Lectures will be enhanced by tutorial, laboratory and other learning activities.

COURSE OBJECTIVES:

Upon successful completion of this course students will be able to:

1. use appropriate anatomical terminology to describe human tissues, organs, systems and body structures
2. using diagrams and models, identify human tissues, organs, systems and body structures
3. relate their knowledge of human tissues, organs, systems and structures to functions and malfunctions

COURSE DETAILS:

A. CLASS SCHEDULE (3 Hours/week) TBA

MWF 12:00 - 12:50

B. TEXTBOOK

Van De Graaff, K.M. (1992). Human Anatomy, (3rd ed.) Dubuque: Wm. C. Brown

C. PREREQUISITES: Biology 30 and Chemistry 30 or equivalents

D. EVALUATION:

Midterm 1 - TAKE HOME	20%
Midterm 2 - TAKE HOME	20%
Assignments	20%
Final Exam	40%

NOTES ON EVALUATION

1. Tests and assignments must be written when scheduled or submitted on the due date. Make up tests or assignments will not be given and you will receive a grade of zero unless:
 - a. the instructor has been notified on or before the day the test is scheduled or due **and**
 - b. a medical certificate is produced indicating a serious illness or
 - c. exceptional circumstances beyond the student's control arise.

If a test or assignment is not written when scheduled or submitted when due and above conditions are met, the weighting of the test may be shifted to the final exam upon request by the student and agreement of the instructor. If a test is missed during the term the 95% rule does not apply.

2. You **must pass the final exam** to receive a grade greater than 5.
3. If you have a 95% average or better on all the course work you may be exempted from writing the final exam.

E. COURSE CONTENT

1. LECTURES

- Body Organization & Terminology (2 hrs.)
- body organization, anatomical terminology, body regions, body cavities, membranes, planes of reference
- Cell (2 hrs.)
- cell studies & diversity
- membranes, cytoplasm, organelles, nucleus
- Histology (3 hrs.)
- definition, classification of tissues
- types of tissues, types of epithelial, connective, muscle and nervous tissues
- Integumentary System (2 hrs.)
- layers, associated structures, functions, epidermal derivatives, clinical considerations
- Skeletal System (2 hrs.)
- organization, functions, bone types
- bone structure, histology and growth
- major bones of axial and appendicular skeleton
- major male-female skeleton differences
- Articulations (2 hrs.)
- joint description and classification according to structure and movability, movements at diarthroses, leverage
- major muscles of the body
- Nervous Tissue and the Central Nervous System (3 hrs.)
- organization and functions, histology, neuron classifications
- neuron membrane, synapse
- brain organization and functions, divisions, white and grey matter, meninges, ventricles, CSF
- spinal cord organization and functions, tracts
- Peripheral Nervous System (2 hrs.)
- organization and functions, cranial nerves, spinal nerves
- reflex arc, types of reflexes

- Autonomic Nervous System (1 hr.)
- organization and functions (divisions, ganglion location)
- characteristics of neurons, synapses, transmitters

- Special Senses (OYO)
- classification of senses
- receptors, accessory structures and general functions

- Endocrine System (2 hrs.)
- glands, exocrine vs endocrine
- locations, descriptions, hormones and functions
- relationship to the hypothalamus

- Circulatory System (2 hrs.)
- organization, functions and major components
- blood plasma and formed elements
- heart structures, blood flow through heart, blood supply
- pulmonary and systemic circuits
- blood vessel types, structures, functions
- major arteries, veins, circulations
- lymphatic system cells, structures and general functions

- Respiratory System (2 hrs.)
- organization and functions
- structures including conducting passages and respiratory membranes, alveolar blood supply

- Digestive System (2 hrs.)
- organization and functions
- structures including conducting passages and respiratory membranes, alveolar blood supply

- Digestive System (2 hrs.)
- organization and functions, regions
- structures, gut layers and histology, blood supply
- accessory structures - teeth, tongue, salivary glands, pancreas, liver, gall bladder

- Urinary System (2 hrs.)
- organization and functions
- structures and kidney histology
- kidney and nephron blood supply

- Reproductive System (2 hrs.)
- organization and functions
- male: structures - testes, ducts, glands, histology of testes and sperm, external genitalia
- female: structures - ovaries, oviducts, uterus, mammary glands, histology of ovary and ovum, external genitalia

2. TUTORIAL/LABORATORY/OTHER LEARNING ACTIVITIES

These will consist of a variety of experiences which will include:

- examining models
- examining skeletons (articulated and disarticulated)
- examining histological slides
- examining preserved tissues (heart, lungs, stomach, kidney, brain)
- examining fresh organs
- manipulating joints
- palpating muscles and other structures
- dismantling muscle models
- computer assisted instruction
- self-study exercises
- films