<u>BIOLOGY 2070 FA – HUMAN STRUCTURE (FOR NURSING STUDENTS ONLY)</u> DONNA NEWHOUSE (CONTRACT LECTURER)

Instructor: Donna Newhouse, M.Sc., Ph.D.(c)

Office: MS 3009

Phone: 766-7387 (NOSM) or 474-9016 (Cell) E-mail: Donna.Newhouse@Lakeheadu.Ca

Required Text:

Human Anatomy 2e. Author: Saladin, K (2008)

Grant's Atlas of Anatomy (12e)

Author: Augur. (2008)

IMPORTANT!!

- 1. Read the Need to Know Page.
- 2. Save all tests in case there is a discrepancy between the mark you think you have and the mark that was entered into the computer.
- 3. If you fail the course, but have a mark of at least 40%, you may write the special exam in August. The mark on this exam *only replaces the mark you received on the final lecture exam;* i.e. it is worth 45% of your mark.
- 4. *Spelling is critical*. The policy for spelling is that it must be letter perfect or it is marked incorrect. No half marks will be awarded.

THE NEED TO KNOW PAGE

Policies regarding writing, marking, and absenteeism of tests/exams

The policies set out below are for the students' benefit. These policies are somewhat stringent and inflexible. These policies are set forth to ensure that all students are treated fairly.

- 1. All tests must be written in pen to be eligible for mark revision.
- 2. Simple adding mistakes should be given to Donna Newhouse for correction.
- 3. If you feel you deserve more marks for a question, attach a note to your paper explaining which question should be re-marked and why. However, should you submit your exam it will be marked in its entirety and thus there is a chance the initial mark may decrease.
- 4. In the event that a student has to miss a lab or lecture exam for emergency or medical reasons, it will be the student's responsibility to get in touch with Donna Newhouse prior to the scheduled exam.

- 5. In the event that a student has to miss a lab or lecture exam for medical reasons, the student must submit a signed medical note (from the attending physician) within 7 days of the scheduled exam.
- 6. There is an established chain of command should you have any problems associated with this course. The chain of command is as follows: T.A.'s...Donna Newhouse...Chairman of Biology...Dean of Science...V.P. Academics...Dr. Gilbert. Issues or problems should be resolved at the lowest level possible (Dr. Gilbert shouldn't have to resolve the problem of a half mark injustice on a lab exam!).

LECTURE/LAB EXAM DATES & MARK BREAKDOWN

Lecture:

Midterm Exam (20%) October 15, 2009

Final Exam (40%) TBA

Lab:

Midterm Lab Exam (20%) October 19th & 23th, 2008 Final Lab Exam (20%) November 23th & 27th, 2009

LABORATORY SCHEDULE 2009

September 14/18 Skeletal System

September 21/25 Skeletal System

Sept 28/Oct 2 Muscular System

October 5/9 Muscular System

October 12/16 No Labs (Thanksgiving)

October 19/23 MIDTERM LAB EXAM

October 26/30 Circulatory System

November 2/6 Circulatory System

November 9/13 Digestion and Reproductive Systems

November 16/20 Renal and Reproductive Systems

November 23/27 FINAL LAB EXAM

LECTURE OUTLINE (Subject to Change)

I. Introduction (pp. 23-44)

A. Objectives of course

- B. Terminology, planes of reference
- C. Organization of the body
- II. Integumentary System (pp. 128-151)
- III. Skeletal System (pp. 175-233)
 - A. Axial division
 - B. Appendicular division
- IV. Muscular System (pp. 267-271; 294-354)
 - A. Muscle tissue
 - B. Principle mm. of the body
 - (1) mm. of facial expression
 - (2) mm. of upper extremity
 - (3) mm. of lower extremity
 - (4) mm. of chest wall
- V. Nervous System (pp. 396-421; 422-466; 468-486)
 - A. Organization
 - (1) anatomical classification
 - (a) central nervous system
 - (b) peripheral nervous system
 - (2) functional classification
 - (a) cerebrospinal fluid
 - (b) autonomic system
 - B. Gross anatomy
 - (1) central nervous system
 - (a) meninges
 - (b) major regions of the brain
 - (c) spinal cord
- (2) peripheral nervous system
 - (a) cranial nerves
 - (b) spinal nerves
 - (3) autonomic nervous system
 - (a) sympathetic division
 - (b) parasympathetic division

INTERNAL ANATOMY

- VI. Circulatory System (pp. 552-569; 72-594; 596-638)
 - A. Microscopic anatomy (vascular connective tissue)
 - (1) plasma
 - (2) formed elements (erythrocytes, leukocytes, thrombocytes)
 - B. General functions
 - (1) transportation
 - (2) protection
 - (3) maintenance of homeostasis
 - C. Heart
 - (1) pericardium
 - (2) layers of the heart (epicardium, myocardium, endocardium)

- (3) chambers and valves
- (4) 'neuromuscular' tissue
- (5) nerve supply to the heart
- D. Arterial blood vessels
 - (1) aorta
 - (2) arteries of the head and neck
 - (3) arteries of upper limb
 - (4) arteries of abdomen
 - (5) arteries of lower limb
- E. Venous blood vessels
 - (1) veins of head and neck
 - (2) veins of thorax
 - (3) veins of upper limb (deep and superficial)
 - (4) veins of lower limb (deep and superficial)
 - (5) veins of the pelvis and abdomen (hepatic portal system)
- VII. Respiration (pp. 663-683)
 - A. General comments
 - B. Nose
 - C. Sinuses of skull
 - D. Pharynx
 - E. Larynx
 - (1) location and function
 - (2) cartilages
 - (3) vocal cords
 - (4) muscles
 - F. Trachea
 - G. Bronchi
 - H. Lungs
 - I. Muscles and nerves involved in breathing
- VIII. Digestion (pp.685-715)
 - A. Functions
 - B. General review of structures involved
 - C. Mouth
 - (1) salivary glands
 - (2) teeth
 - (3) muscles of mastication
 - D. Pharynx
 - E. Esophagus
 - F. Stomach
 - G. Liver
 - H. Pancreas
 - I. Small intestine
 - J. Large intestine
 - K. Rectum, anus
- IX. Urinary System (pp. 717-735)
 - A. Functions
 - B. Kidney
 - (1) gross anatomy

- (2) microscopic anatomy
- C. Ureter
- D. Bladder
- E. Urethra
- X. Reproductive System (pp. 737-767) A. General comments

 - B. Male reproductive structures
 - (1) scrotum
 - (2) testes (enclosing capsule, seminiferous tubules)
 - (3) epididymis
 - (4) vas deferens
 - (5) seminal vesicles
 - (6) prostate gland
 - (7) Cowper's glands
 - (8) urethra
 - (9) penis
 - C. Female reproductive structures
 - (1) ovaries
 - (2) fallopian tubes
 - (3) uterus
 - (4) vagina
 - (5) external structures