

**Human Physiology II (Principles of Physiological Regulation)**

Kinesiology 306

Section: D100

Term: 2007 Fall

Instructor: Dr. C. Krieger

Email: ckrieger@sfu.ca

Discussion Topics: Tentative Lecture Schedule

Date - Topic and Berne Chapters

Sept. 5 (1) - Course Structure; The nervous system and its components (6)

Sept. 7 (2) - General organization of the central nervous system (6)

Sept. 10 (3) - Ionic equilibria and resting membrane potential (1, 2)

Sept. 12 (4) - Generation and conduction of action potentials (3)

Sept. 14 (5) - Axonal propagation and synaptic transmission (4)

Sept. 17 (6) - Membrane receptors, second messengers and signal transduction (5)

Sept. 19 (7) - Tactile and proprioceptive information (7, 8)

Sept. 21 (8) - Motor neuron & muscle (7, 12)

Sept. 24 (9) - Reflex organization of spinal cord (12)

Sept. 26 (10) - Integrative function of spinal cord (13)

Sept. 28 (11) - Basal ganglia & cerebellum (13, 14)

Oct. 1 (12) - Brain stem and cortical control of movement (13, 14)

Oct. 3 (13) - Vision: retinal and cortical aspects (9)

Oct. 5 (14) - Auditory and vestibular system (10)

## **Human Physiology II (Principles of Physiological Regulation)**

Oct. 8 - Thanksgiving

Oct. 10 (15) - Cerebral cortex & higher functions (16)

Oct. 12 (16) - Development, plasticity and learning in CNS (16)

Oct. 15 (17) - Autonomic nervous system (15)

Oct. 17 - Midterm Exam I

Oct. 19 (18) - Gastrointestinal introduction (37)

Oct. 22 (19) - Gastrointestinal motility (38)

Oct. 24 (20) - Digestion (39)

Oct. 26 (21) - Absorption (39)

Oct. 29 (22) - GI Principles + catch-up

Oct. 31 (23) - Endocrine Principles (also second messengers and signal transduction) (45)

Nov. 2 (24) - Whole body metabolism (46)

Nov. 5 (25) - Endocrine pancreas, Diabetes (47)

Nov. 7 (26) - Pituitary gland (47)

Nov. 9 - Midterm Exam II

Nov. 12 (27) - Thyroid gland (48)

Nov. 14 (28) - Parathyroid; Regulation of calcium & phosphate (49)

Nov. 16 (29) - Adrenal (49)

Nov. 19 (30) - Kidney (50)

Nov. 21 (31) - Endocrine pancreas (51)

Nov. 23 (32) - Immunology (use Silverthorne textbook) (52)

## **Human Physiology II (Principles of Physiological Regulation)**

Nov. 26 (33)- Immunology II (notes)

Nov. 28 (34) - Integrative physiology

Nov. 30 - Catch-up and Review

Dec. 3 - Review

Apr 4 - REVIEW

Grading:

Required Texts: Berne et al. Physiology, latest edition (B et al.)

And/ Or: Boron & Boulpaep; Medical Physiology, 1st Ed. Saunders (B&B)

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: PREREQ:

KIN 201, 205 (formerly KIN 100), 207, CHEM 281 (or 150, 155, PHYS 102 (or 121), MATH 155 (or 152). Students other than Kinesiology Majors require Kin. 205 or Bisc. 305 plus permission of the instructor.

Notes: FORMAT: 3 x 1 hour lecture, 1 hour tutorial

Failure to attend an examination

Students who miss examinations due to exceptional circumstances (such as serious illness or compassionate reasons) are required to obtain a physician's certificate, whereby the physician states that you were unable to write your midterm or final on the set date due to a medical condition beyond your control, or other supporting documents in order to obtain consideration in the course. Such documents must be filed with the School Director (via the Kinesiology office) or Registrar within four calendar days of the date on which the examination was to have been written. Exceptional circumstances must be approved by the Undergraduate Program Committee in order for a student to receive consideration.

Students must check the exam schedule when making course selections. Students are reminded that final examinations may be scheduled at any time during the examination period and that students should avoid making travel or employment arrangements for this period.

Academic honesty and student conduct

Academic honesty is a condition of continued membership in the University community.

Academic dishonesty, including plagiarism or any other form of cheating is subject to serious

## **Human Physiology II (Principles of Physiological Regulation)**

academic penalty, i.e. failure on an assignment, failure in a course, suspension or expulsion from the University.

The University codes of student conduct and academic honesty are contained in policies T10.01 and T10.02 which are available in the Course Timetable and on the Web via <http://www.reg.sfu.ca>.

July 2000

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.