

Course Outline - Fall 2007
The University of Winnipeg
Kinesiology and Applied Health

KIN-2204/3 INTRODUCTION TO HUMAN PHYSIOLOGY

INSTRUCTOR: Enid Brown

OFFICE: Room 1D36, 786-9341, e.brown@uwinnipeg.ca

OFFICE HOURS: Mon., Wed., Fri. 9:00 – 10:00 AM and 2:30 - 3:30 PM

LECTURES: Slot , 10:30 - 11:20, Room 2D11

LAB: Monday 2:30 - 4:30 **or** Tuesday 4:30 - 6:30, Room 1D11

LAB INSTRUCTOR: Gerren McDonald

<http://www.uwinnipeg.ca/faculty/pass/kah/faculty/ebrown/ebrown.htm>

COURSE DESCRIPTION:

An introduction to the functioning of the human body with an emphasis upon those systems and elements that are most heavily involved in movement (energy pathways, muscular, cardiovascular, respiratory, and nervous systems).

Note: Students are not permitted to hold credit for this course in addition to the Biology courses BIOL-1103/6 (Human Biology) or BIOL-1112/6 (Human Anatomy and Physiology).

This is NOT the course required for Athletic Therapy, unless you have transferred from another university. It is not a required course for Education students.

This course or Human Anatomy and Physiology BIOL-1112/6 is acceptable for people seeking certification in Personal Fitness Training, as a pre-requisite for Exercise Physiology KIN-3106/3, or for the Kinesiology 4-year BA or BSc.

This course is primarily intended for students seeking a degree in Arts or Education. It is not intended for Biology majors.

Note: Classes will be held Tuesday, November 27 in lieu of Thanksgiving and will follow a Monday schedule. This means there will be a lecture and lab on Monday, November 26 and Tuesday, November 27. The last day of class in this course is Tuesday, November 27.

OBJECTIVES:

1. Students will understand the basic functioning of body cells.
2. Students will understand the function of the 4 main types of tissues.
3. Students will understand the basic functioning of the body systems.
4. Students will define and describe the relevant anatomy of body tissues and systems.
5. Students will relate their knowledge of cells, tissues, and systems to the integrated functioning of the whole body.
6. Students will appreciate the complex functioning of the human body.
7. Students will value an understanding of physiology as it relates to their preparation in other biophysical or biomedical areas.

SERVICE FOR STUDENTS WITH DISABILITIES:

Students with documented disabilities requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., access to volunteer note-takers) are encouraged to contact Disability Services at 786-9771 to discuss appropriate options. Specific information about DS is available on-line at <http://www.uwinnipeg.ca/index/services-disability>. All information about disability is confidential.

REQUIRED MATERIALS:

Robinson, D., Brown, E., Lab Manual of Human Physiology, 5th edition.

Brown, Enid, Class Notes for Human Physiology (KIN-2204/3), 7th edition .
available online at my website

<http://www.uwinnipeg.ca/faculty/pass/kah/faculty/ebrown/ebrown.htm>

RECOMMENDED TEXT:

Marieb, E., Essentials of Human Anatomy and Physiology (7th ed.), Addison Wesley, 2003. Likely any Anatomy and Physiology textbook published in the last 5 – 10 years would be fine. You are welcome to ask me about it.

GRADING:

Midterm Test (Wed., Oct. 24, 10:30 AM)	30%
Lab Tests and Assignments	25%
Final Exam (Wed., Dec. 12, 9:00 AM)	45%

For each lab there will be a lab test or an assignment to be completed. Tests will primarily (but not exclusively) focus on the previous week's **lab and lecture** material. A doctor's note will be the only acceptable excuse for missing a lab or a lab test. If a lab test is missed, and there is no doctor's note, a grade of zero will be recorded for that test. If a lab is missed without a doctor's note the assignment for that lab will receive half marks. Any assignments handed in the day after they are due will receive half marks. Assignments handed in more than one day late will receive no marks. Any assignments not handed directly to one of the course instructors must be dated and initialed by one of the department secretaries. Papers received without this will be assumed to be late. The Customer Service desk is no longer accepting papers.

In an attempt to reduce paper and bulletin board space all lab answers, test and exam marks will be posted **online only** at my website:

<http://www.uwinnipeg.ca/faculty/pass/kah/faculty/ebrown/ebrown.htm>

If you fail to attend a midterm test or final exam you are expected to contact the instructor immediately, and subsequently present a doctor's note verifying the illness that required you to be absent. A note stating that you were seen by a physician is not sufficient.

Test and exam question types will be: single word answer, definitions, short answer (2 - 5 marks), long answer (6 - 10 marks). True and false, matching, and multiple choice type questions will be used sparingly or not at all. The final exam will be cumulative, but a greater weight will be placed upon material presented after the midterm test. Students may be asked to produce identification at the midterm test and final exam. For test and exams you are not allowed to bring any electronic devices (e.g. pocket computers, cell phones, PDA's, etc.)

Final mark is determined by direct calculation based on the stated percentages. The score is then converted to a letter grade on the following approximate basis:

A+	95>	A	85 - 95 range
A -	80 – 85 range	B+	75 – 79 range
B	70 – 74 range	C+	65 – 69 range
C	60 – 64 range	D	50 – 59 range
F	< 50		

Please note this is a guideline only. The class distribution of marks will be examined and natural groupings will determine the final letter grade assignment.

GRADING POLICY:

The Department of Kinesiology and Applied Health acknowledges the importance of timely evaluation and feedback. Students will be expected to be available for all tests and exams that are scheduled within the normal class or exam periods. Should a student be unavailable to write a test, exam, or submit a paper due to circumstances other than illness (verified by a physician's note) or death in the family (verified by obituary or other suitable documentation) the student will receive zero for that exam, test, or item of work.

The Department has a policy of maintaining a class grade point range, depending upon the year of the course. This ensures that grades are awarded consistent with other departments. Students may make an appointment to discuss their relative standing at any time during the course.

A student may appeal for an incomplete or a deferred final test or exam when circumstances beyond the student's control create situations in which it is impossible, or cause undue hardship for the student to write the final exam or test as scheduled, or complete an item of work by the end of the evaluation period of the course.

Note: Final date for withdrawal from the course without academic penalty is October 30, 2007 . Please refer to Section VII in the University Calendar for information regarding Appeals, Course Grading and Academic Misconduct.

UNIVERSITY POLICY ON PLAGIARISM:

In order to deal with the possibility of plagiarism, instructors in the Department of Kinesiology and Applied Health may require that an electronic copy of your assignment be submitted in addition to your hard copy. When plagiarism is discovered or if there is a significant discrepancy between the electronic version and the hard copy, the professor/instructor is required to report it immediately to the Departmental Review Committee (DRC) and ultimately to the Senate Academic Misconduct Committee.

Acts of Plagiarism may include, but are not limited to, one or more of the following:

- not giving recognition to the author for phrases, sentences, thoughts, code, or arguments incorporated in written work, software or other electronic sources. This can take the form of incomplete footnotes, endnotes, references and/or bibliographies; not using quotation marks or referencing appropriately when quoting directly; not referencing appropriately when quoting indirectly, to indicate the source of the ideas and work of another;
- submitting the published or unpublished work of another person in part or in whole as one's own;
- submitting the same work for evaluation to more than one course without the consent of each instructor to do so;
- two or more students submitting identical or virtually identical work for evaluation when the work was intended to be completed individually.

Students are strongly recommended to review the section on plagiarism in the university calendar.

Penalties as determined by the Senate Academic Misconduct Committee vary from no finding of misconduct, a warning, an " F" in the assignment, an "F" in the course, to expulsion from the University.

EXAM AND ASSIGNMENT RETENTION POLICY:

The Department of Kinesiology and Applied Health will maintain a policy that requires all midterm tests (not returned) and all final exams to be kept on file, in a secure location, for a minimum of one year from date of exam administration. After such time, the course instructor and / or department chair may dispose of material in a manner that does not jeopardize student confidentiality and integrity of course exam material.

Lab / class quizzes and assignments, including term papers, that have not been claimed by students will be kept on file for a minimum of 1 month from the return date of marked quiz and assignment. After such time, the course instructor and / or department chair may dispose of material in a manner that does not jeopardize student confidentiality and integrity of course quiz material.

TENTATIVE LECTURE/LAB SCHEDULE

Students are reminded to respect the privacy and dignity of their fellow students. All data and information collected or shared should be treated as confidential.

Date	Lectures	Labs
Week 1 Sept. 6	Homeostasis, negative feedback, pH, organic molecules	No Lab
Week 2 Sept. 11	Fluid compartments, cell membrane, movement across cell membranes, organelles	No Lab
Week 3 Sept. 18	Metabolic pathways, mechanism of gene expression	1. Movement Across Cell Membranes
Week 4 Sept. 25	Tissues, skin, bone	2. Cellular Physiology
Week 5 Oct. 2	Muscle ultrastructure, muscle contraction, motor units, force-velocity, fibre types, NMJ	No Lab
Week 6 Oct. 12	Membrane potential, action potential and propagation	No Lab (Thanksgiving)
Week 7 Oct. 16	Synapses and integration, brain structure and function, spinal cord, reflexes, sensory tracts	3. Muscle
Week 8 Oct. 23	MIDTERM TEST Motor tracts, ANS, mechanics of respiration, partial pressures	4. Neuroscience (brain dissection)
Week 9 Oct. 30	Movement of gases, gas transport, control of ventilation, Heart blood flow	4. Neuroscience (cont'd)
Week 10 Nov. 6	Cardiac electrical conduction, blood vessels, blood pressure, venous return, control of BP	5. Respiratory Function & Control
Week 11 Nov. 13	Lymphatic system, Urinary system, Mechanism of hormone action	6. Cardiovascular System

Week 12 Nov. 20	Pituitary, major endocrine glands, Blood	7. Kidney Function and Urinalysis
Week 13 Nov. 27	Digestive system histology, secretions, absorption, Immunity, blood groups	8. Endocrinology