

GRANDE PRAIRIE REGIONAL COLLEGE
PEAK: Department of Physical Education, Athletics & Kinesiology

PE 1020
ELEMENTARY PHYSIOLOGY

Course Outline: 2003-2004

1. General Information

Instructor: Ray Kardas
Office: C418
Phone: 539-2990
Lectures: MW: 9:00 – 9:50. in D308
1st Semester - Friday from 8:30 – 9:20 am
2nd semester – Friday from 9:00 – 9:50 am
Labs:
L1 – Tuesdays from 11:30 am to 12:20 am in J130
L2 – Fridays from 10:30 pm to 11:20 pm in J130
E-mail: rkardas@gprc.ab.ca

Calendar Description

This course provides an introduction to human physiology from cellular to systemic levels, with special emphasis on systems which adapt to exercise stress.

2. Course Objective

At the conclusion of the course, the student will be able to describe the normal physiology of the major systems of the human body.

3. Required Resources

Required Texts:

- 1) Germann, W.J., and Stanfield, C.L. (2002). Principles of Human Physiology. San Francisco: Benjamin Cummings
- 2) Etchberger, C. and Wordlie, M. (2002). Study Guide for Principles of Human Physiology. San Francisco: Benjamin Cummings
- 3) Student notes for PE 1020 when available

Labs: **Note***** Students are required to attend lab sessions in the second semester. Failure to do so results in a 2% deduction for each lab session missed.

4. **Evaluation**

Mid-term test 1: Fall	20%
Christmas Exam:	30%
Test 2: Winter	10%
Test 3: Winter	10%
Lab Test (April 7 th) 11:30 am – 1:00 pm	10%
Chapter Questions/ Problems	20%

Each examination will include all material covered between the time of the previous examination and the subsequent examination. Exam papers will not be returned to students for keeping. Examinations may be comprised of the following types of questions: MC, T/F, fill in the blank, and short answer.

TENTATIVE COURSE SEQUENCE

Note** Adjustments may be made or required to accommodate student needs.

September 3, 5	Chapter 1 (Introduction To Physiology)
September 8, 10, 12, 15	Chapter 2 (The Cell: Structure And Function)
September 17, 19, 22, 24	Chapter 3 (Cell Metabolism)
September 26, 29	Chapter 4 (Cell Membrane Transport)
October 1, 3, 6, 8, 10	Chapter 5 (Chemical Messengers & The Endocrine System)
October 13	Thanksgiving Day – No Classes
October 15, 17, 20	Chapter 6 (Nerve Cells & Electrical Signaling)
October 22, 24, 27	Chapter 7 (Synaptic Transmission & Neural Integration)
October 29	Mid-Term Test #1 11:30 – 1:00 Pm (Chapters 1 – 7)
November 3, 5, 7	Chapter 8 (The Nervous System: CNS)
November 10	Fall Session Break – No Classes
November 12, 14, 17, 19, 21, 24	Chapters 9 & 10 (The Nervous System: Sensory, Automatic & Motor)
November 26, 28 & December 1, 3, 5, 8	Chapter 11 (Muscle Physiology)
December 11 – 19	PE 1020 Exam Somewhere In Here
January 7 to 26	Chapter 12 (The Cardiovascular System: Cardiac Function)
January 28	Test #2 (10%)
January 30, February 2, 4	Chapter 15 (The Respiratory System: Breathing Mechanics)
February 6, 9, 11, 13	Chapter 16 (The Respiratory System: Gas Exchange And Regulation Of Breathing)
February 16	Family Day – No Classes
February 17-20	Winter Break – No Classes
February 23	Chapter 16 – Complete
February 25	Test #3 (10%)
February 27, March 1, 3, 5	Chapter 17 (The Urinary System: Renal Function)
March 8, 10, 12	Chapter 18 (The Urinary System: Fluid And Electrolyte Balance)
March 15, 17, 19, 11	Chapter 19 (The Digestive System)
March 24, 26, 29	Chapter 20 (The Endocrine System: Regulators Of Energy Metabolism And Growth)
March 31, April 2	Chapter 22 (The Immunes System)
April 5	Chapter 23 (The Whole Body: Integrated Physiological Responses To Exercise)
April 7	Lab Exam
April 9	Good Friday – No Classes
April 12, 14	Chapter 23 - Finish