



**DEPARTMENT OF PHYSICAL EDUCATION,
AND KINESIOLOGY**

COURSE OUTLINE - FALL 2015

PE1015 A2, ESSENTIALS OF HUMAN PHYSIOLOGY

3 Credit (3-0-0) UT [45 Hrs.]

INSTRUCTOR: RAY KARDAS **PHONE:** 780 539-2990
OFFICE: K214 **E-MAIL:** rkardas@gprc.ab.ca

OFFICE HOURS: TBD/TBA

DELIVERY MODE(S): Lecture, Problem-solving exercises

PREREQUISITE(S)/COREQUISITE: N/A

REQUIRED TEXT/RESOURCE MATERIALS:

Stanfield, Cindy L. (2013). Principles of Human Physiology. 5th Edition, San Francisco: Pearson.

Class notes for PE1015 will be posted/or distributed in class.

CALENDAR DESCRIPTION:

The main focus of this introductory course is systemic functions in the human body with special emphasis on systems that respond and adapt to exercise stress. The majority of the course will focus on the cardiovascular, respiratory, musculoskeletal, nervous, and neuroendocrine systems. A prior knowledge of general cellular function and metabolism (such as obtained in Biology 30) is presupposed.

LEARNING OUTCOMES:

Upon successful completion of this course the student should be able to:

- Demonstrate an in-depth understanding of the main principles of the neurophysiology, muscle, cardiovascular, respiratory and neuroendocrine systems,

- Demonstrate an understanding of and be able to identify how changes in normal physiology lead to disease, and
- Demonstrate the capacity to integrate information from different sources (biology, chemistry and physics) and effectively communicate this both verbally and in writing.

COURSE OBJECTIVES:

At the conclusion of the course, the student will be able to:

1. Understand basic physiological concepts and processes.
2. Define basic structure-function relationships that exist within the human body.
3. Describe the regulation of various physiological systems that comprise the human body.

COURSE SCHEDULE/TENTATIVE TIMELINE:

Mondays and Wednesdays, 10:00 a.m. – 11:20 a.m.

A. September 2nd – October 5th:

- Introduction to Physiology
- Cell: Structure and Function
- Cell Metabolism
- Cell Membrane Transport

October 14 – November 2nd:

- Chemical Messengers
- Neuroendocrine physiology
- Central Nervous System

November 9th – December 7th:

- Nervous System: Autonomous and Motor
- Muscle Physiology
- Cardiovascular – Respiratory Systems: General Overview

EVALUATIONS:

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| • Test #1 | October 7 | 30% |
| • Test #2 | November 4 | 30% |

- Final Exam (scheduled between Dec. 9-19th) 40%

GRADING CRITERIA:

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation
A ⁺	4.0	90 – 100	EXCELLENT
A	4.0	85 – 89	
A ⁻	3.7	80 – 84	FIRST CLASS STANDING
B ⁺	3.3	77 – 79	
B	3.0	73 – 76	GOOD
B ⁻	2.7	70 – 72	
C ⁺	2.3	67 – 69	SATISFACTORY
C	2.0	63 – 66	
C ⁻	1.7	60 – 62	
D ⁺	1.3	55 – 59	MINIMAL PASS
D	1.0	50 – 54	
F	0.0	0 – 49	FAIL
WF	0.0	0	FAIL, withdrawal after the deadline

STUDENT RESPONSIBILITIES:

Refer to the College Policy on Student Rights and Responsibilities at www.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES

STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the College Student Misconduct: Academic and Non-Academic Policy at www.gprc.ab.ca/d/STUDENTMISCONDUCT

**Note: all Academic and Administrative policies are available at www.gprc.ab.ca/about/administration/policies/

UNIVERSITY TRANSFER (If applicable):

UA*, UC*, UL, AU, AF, KUC*, GMU

* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions.

Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

Please refer to the Alberta Transfer guide for current transfer agreements: www.transferalberta.ca