



**DEPARTMENT OF PHYSICAL EDUCATION,
AND KINESIOLOGY**

COURSE OUTLINE - FALL 2016

PE1015 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

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.

PREREQUISITE(S)/COREQUISITE: N/A

REQUIRED TEXT/RESOURCE MATERIALS:

Stanfield, Cindy L. (2017). Principles of Human Physiology. 6th Edition, San Francisco: Pearson.

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

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

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.

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.

TRANSFERABILITY:

Transfers to: UA*, UC*, UL, AU, AF, KUC*, GMU

***Warning:** Although we strive to make the transferability information in this document up-to-date and accurate, **the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities.** Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page <http://www.transferalberta.ca> or, if you do not want to navigate through few links, at <http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2>

**** 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**

EVALUATIONS:

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| • Test #1 | October 5 | 30% |
| • Test #2 | November 9 | 30% |
| • Final Exam (scheduled between Dec. 7-16th) | | 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

COURSE SCHEDULE/TENTATIVE TIMELINE:

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

A. August 31st – October 3rd:

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

October 12th – November 7th:

- Chemical Messengers
- Neuroendocrine physiology
- Central Nervous System

November 14th – December 5th:

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

Refer to the College Policy on Student Rights and Responsibilities:

<https://www.gprc.ab.ca/about/administration/policies>

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Calendar at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at <https://www.gprc.ab.ca/about/administration/policies>