

## PHYSICAL EDUCATION AND KINESIOLOGY DEPARTMENT

#### **COURSE OUTLINE -WINTER 2018**

PE1030 (A3): Integrative Human Physiology – 3 (3-0-1) 60 Hours for 15 weeks

**INSTRUCTOR:** Raymond Kardas

OFFICE: K214 OFFICE: K214

**OFFICE HOURS:** As posted and as requested

CLASS TIMES: Monday/Wednesday 10:00 am - 11:20 a.m., A211

Lab times: A3: Thursday 10:00 – 10:50 p.m., J204

B3: Friday 8:30 – 9:20 a.m., J229

## **CALENDAR DESCRIPTION:**

The focus of this introductory physiology course is cellular functions in the human body with special emphasis on control and integration of these functions. Whenever possible, the responses and adaptations to exercise will be used as a foundation upon which the concepts of control and integration will be discussed. Some topics from PE1015, Essentials of Human Physiology, will be revisited to discuss control and integration of cellular and systematic function.

## PREREQUISITE(S)/COREQUISITE:

PE1015

## REQUIRED TEXT/RESOURCE MATERIALS:

Stanfield, Cindy L. (2017). Principles of Human Physiology, 6th Edition. PE1030 Lab Manual (Provided in labs)

## **DELIVERY MODE(S):**

Lectures, labs

## **COURSE OBJECTIVES:**

- To provide the student with a knowledge and understanding of the basic concepts of physiology in selected systems of the body.
- To examine the critical systems associated with health, exercise and sport.
- To provide the basic principles of the following systems: neural-endocrine systems, muscular systems, cardio-vascular system, respiratory system, digestive systems.

#### **LEARNING OUTCOMES:**

Students who successfully complete this course will be able to:

- Identify and explain the metabolic and physiological determinant of sports and athletic performance
- Explain the basic structure-function relationships that exist within the human body and the regulation of these physiological processes
- Explain the control and integration of cellular and systemic function in responses to the challenges of health and fitness and sport performance with reference to specific systems.

## TRANSFERABILITY:

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

\*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 <a href="http://www.transferalberta.ca">http://www.transferalberta.ca</a> or, if you do not want to navigate through few links, at <a href="http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2">http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2</a>

\*\* 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:**

# **GRADING CRITERIA:** (The following criteria may be changed to suite the particular course/instructor)

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less** than C-.

Evaluation will be completed and expressed in raw marks (%) throughout the course. Grades (using the letter grading system) will be assigned only to the final distribution of mark totals for the course. Such assignment will be based on a combination of absolute achievement and relative performance in the class. Final grades will be assigned as per information in the GPRC Admission Guide.

# **Examinations:**

Test #1	February 14	35%	
Test #2	March 21	25%	
LAB Assignments/LAB Final Test: April 4			
Final Exam (	Date TBD: April 16-23)	30%	

Alpha	4-point	Percentage	Alpha	4-point	Percentage
Grade	Equivalent	Guidelines	Grade	Equivalent	Guidelines
A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	С	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
В	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

## **COURSE SCHEDULE/TENTATIVE TIMELINE:**

January 8 – February 7 <sup>th</sup>	<ul> <li>Cardiovascular physiology including blood</li> <li>Neural-endocrine responses to exercise</li> <li>Blood-pressure responses to exercise</li> </ul>	
February 14	• Test #1	35% of grade
February 19-23	Winter Break	
February 26 – March 19	<ul><li>Respiratory physiology</li><li>Acid-Base Balance</li></ul>	
March 21	Test #2	25% of grade
March 26 – April 11	<ul> <li>Endocrine Physiology and Regulation of Energy Metabolism and Growth</li> <li>G-I physiology with emphasis on absorption of foods and neural hormonal control of appetite</li> </ul>	
April 4	LAB test in class	10% of grade
Date TBA: April 16-23	Final Exam	30% of grade

# STUDENT RESPONSIBILITIES:

## 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 <a href="http://www.gprc.ab.ca/programs/calendar/">http://www.gprc.ab.ca/programs/calendar/</a> or the College Policy on Student Misconduct: Plagiarism and Cheating at <a href="https://www.gprc.ab.ca/about/administration/policies">https://www.gprc.ab.ca/about/administration/policies</a>

<sup>\*\*</sup>Note: all Academic and Administrative policies are available on the same page.