

Department of Physical Education, Athletics & Kinesiology

COURSE OUTLINE – WINTER 2015 PE 2000 Exercise Physiology

INSTRUCTOR: Ray Kardas **PHONE** Office: 539-2990

Labs: Andrew Boone **E-MAIL** rkardas@gprc.ab.ca

OFFICE K214 CLASS TIMES Monday & Wednesday

HOURS As posted and as 10:00 a.m. – 11:20 a.m. J203

requested LAB TIMES L2-Tuesday 2:30-4:20pm

L3 – Monday 12:00-1:50pm L1 – Friday 9:30 – 11:20 am All labs are in Studio B3

PREREQUISITE(S): PE1015 Essentials of Human Physiology

REQUIRED TEXT/RESOURCE MATERIALS:

- 1. Kraemer, W.J., Fleck, S.J. and Deschenes. (2012). Exercise Physiology: Integrating Theory and Application. Philadelphia: Lippincott, Williams and Wilkins
- 2. PE2000 Course Pack Physiology of Exercise Laboratory Manual. University of Alberta. (Provided as part of lab fees)

CALENDAR DESCRIPTION:

The lecture, laboratory experience and supplementary readings are designed to promote an understanding of the physiological responses to acute and chronic exercise. Successful completion of the course requirements will enable one to understand the basic function of various physiological systems: describe the various physiological changes that occur during acute exercise and the various adaptations to different forms of exercise training and environmental influence; understand the basic ergometry and other laboratory instrumentation for evaluating physiological responses to exercise; and experience exercise stress in a laboratory setting as a participant and tester.

CREDIT/CONTACT HOURS: 3 (3-0-2) UT [75 hours]

DELIVERY MODE: Lecture, Problem-Solving exercises, lab

OBJECTIVES:

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

- 1. Understand the basic function of various physiological systems at rest and during exercise.
- 2. Describe the various physiological adaptations to different forms of exercise training and environmental influences.
- 3. Understand basic ergometry and other laboratory instrumentation for evaluating physiological responses to exercise.
- 4. Experience exercise assessment in a laboratory setting as a participant and tester.

TRANSFERABILITY:

UA, US, UL AU, AF, CU, KUC (See GPRC Academic Calendar)

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.

GRADING CRITERIA:

Alpha Grade	4-point Equivalent	Designation	
A ⁺	4.0	EXCELLENT	
Α	4.0		
A -	3.7	FIRST CLASS STANDING	
B+	3.3	FIRST CLASS STANDING	
В	3.0	GOOD	
В-	2.7	GOOD	
C ⁺	2.3	SATISFACTORY	
С	2.0		
C-	1.7		

D+	1.3	MINIMAL PASS	
D	1.0	MINIMALIASS	
F	0.0	FAIL	
WF	0.0	FAIL, withdrawal after the deadline	

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. The equivalent percentages for the above letter grades are found in the current GPRC academic calendar under Admissions (Academic Regulations).

EXAMINATIONS

Lecture

Midterm Exam	20%	February 25 th , 2015
Final Exam	40%	TBA
Laboratory		
Lab Write-Ups (2 @10% each)	20%	See Schedule for due dates.
Lab Take Home Questions	5%	Due at the start of each lab.
Final Lab Exam	15%	April 8th, 10:00 -11:20 am
TOTAL	100%	-

STUDENT RESPONSIBILITIES:

This is a 3 credit course with 2 classes and 1 lab a week. It is the student's responsibility to read and understand the required areas of the text. The objective of the lectures is to highlight the major concepts of each topic area and provide examples to facilitate comprehension.

Students are encouraged to read other chapters in the text such as 4, 13, & 14 to gain an appreciation of physiological testing, training methodology, training adaptations and ergogenic aids that impact the acute and chronic adaptations to exercise. Some of these topics will be incorporated in the lectures and labs but are primary topics of other courses.

STATEMENT ON ACADEMIC REGULATIONS AND STUDENT CONDUCT:

Refer to the Student Conduct section of the College Admission Guide at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/

PE2000 Lab Schedule (Winter 2015)

Mar. 23-27	NO LABS	
Mar. 16-20	10	Body Comp/Review
Mar. 9-13	9	Thermoregulation
Mar. 2-6	8	Maximal Oxygen Consumption (Lab write-up)
Feb. 23-27	7	Anaerobic Threshold
Feb. 16-20	READING WEEK NO LABS	
Feb. 9-13	6	Physiological Responses to Submax PO
Feb. 2-6	4	Intermittent vs. Continuous
Jan. 26-30	3	Anaerobic Power & Capacity (Lab write up)
Jan. 19-23	2	Energy Expenditure & Efficiency
Jan. 12-16	1	Intro/Ergometry
Week of:	Lab#	<u>Lab Title</u>

Mar. 30-Apr. 3 NO LABS

Apr. 6-10 Final Lab Exam Wed. Apr. 8th in PE 2000 class