# Physical Education, Athletics & Kinesiology Grande Prairie Regional College

# PE2000 - PHYSIOLOGY OF EXERCISE 3(3-0-2) UT Pending Fall 2005

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Office Hours: TBA TBA

**Class Times:** 

## **Course 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 stresses in a laboratory setting as a participant and tester.

**Prerequisite:** PE 1010 or equivalent

Text:

McArdle, Katch & Katch. *Essentials of Exercise Physiology*. 2nd Edition, Lippincott, Williams & Wilkins

PEDS 200 Course Pack - *Physiology of Exercise Laboratory Manual*. University of Alberta.

#### **Course Evaluation:**

Students are responsible for all information presented in the lectures, laboratory experiences, assigned textbook and other readings. Course requirements will be evaluated and expressed in raw marks throughout the course. Grades (using the letter grading system) shall be assigned to the final distribution of marks for the course. Final grades shall be assigned based on a combination of **absolute** and **relative** performance in the class.

Lecture: Mid-Term Exam 20%

Final Exam 40%

Laboratory: (see details below) 40%

Total = 100%

- The laboratory exam will be held during the last lecture class.
- Lab questions You are required to complete the laboratory questions found at the end of each lab prior to the start of your lab. These are worth **5%** of your lab grade.
- Lab write-ups (2 in total) are due the following lab (1-week later, depending on the schedule) at the start of the lab session. No exceptions (10% for first lab write-up and 10% for second lab write-up). No late labs will be accepted at all, unless you have a medical note. You will be given a grade of 0 for any late lab write-ups. Remember coming late to a lab that a write-up is due will be given a grade of 0.
- Laboratory experiences will be provided on a demonstration-seminar format. Students will participate in data collection, reduction, and interpretation on a regular basis, and occasionally must participate as subjects. A significant portion of each lab period will be devoted to discussion of the current topic and students must be prepared to assist, ask and answer questions.

### **Grading System:**

Letter Grade	Grade Point	Percentage
	Value	Range
A+	4.0	94 – 100
Α	4.0	89 – 93
A-	3.7	85 – 88
B+	3.3	81 – 84
В	3.0	77 – 80
B-	2.7	72 – 76
C+	2.3	69 – 71
С	2.0	64 – 68
C-	1.7	60 – 63
D+	1.3	55 – 59
D	1.0	50 – 54
F	0.0	Below 50

#### **Student Responsibilities:**

**Reading** the upcoming topic in the textbook BEFORE each lecture will help students understand and keep pace with the flow of lectures.

**Questions** always arise and it is important for the student to act on them. Ask your questions during class or bring them up at the end of class or send your question(s) via email.

"Study-buddy" or study groups are highly recommended. Having someone to discuss the lecture with or review course material has been very helpful to many students.

**Attendance** will not be monitored during the lectures. Students are responsible for all material assigned or presented. Lab attendance is mandatory. If you miss a lab without medical reasons (Health Services Form with Doctor's signature is required), there will be 5% deducted from your lab grade. If you miss a lab write-up, 10% will be deducted from

your lab grade.

#### Schedule:

		Chapters	Lab Experience	
1	Introduction, WHMIS			
	Energy Expenditure/Ergometry	6, 7	1 & 2	
Ш	Energy Transfer During Exercise	4, 5	3	
IV	Fatigue during exercise & Recovery		4	
V	Neuromuscular System & Exercise 12		5	
VI	Cardiorespiratory System & Exercise	10, 11	6, 7 & 8	
VII	Environment & Exercise	16	9	
VIII	Body Composition	18	10	
IX	Sport Nutrition	9		
Χ	Exercise Endocrinology	13		

Students are encouraged to read chapters 8, 14, 16 and 17 to gain an appreciation of physiological testing, training methodology, training adaptations and ergogenic aids that impact the acute and chronic adaptations to exercise. These topics will be incorporated to some extent in the lectures and labs but are primary topics of other courses in our Faculty.

<u>Hepatitis B Inoculations</u>. It is strongly encouraged that all students have a Hep B inoculation. These can be obtained for a nominal fee through the Mistahia Health Centre.