GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF PHYSICAL EDUCATION, ATHLETICS & KINESIOLOGY

Course Outline
PE 2420 Introduction to Nutrition for Exercise and Performance

I. General Information, Fall 2007

Instructor:	Ray Kardas	**Phone:**	539-2990
Office:	C418		
Class Time:	Tuesdays and Thursdays 1:00 pm – 2:20 pm		
Location:	D308		
Credit:	3.0 Credits		
Applying for transfer to:	PEDS 2xxx or NUTR 100 (3 credits)--U of A KNES 237 or junior option (3 credits)-- U of C 1 unspecified Education option (3 credits)-- U of L		

Description:
The course examines the fundamental principles of nutrition and the effects it has in society, athletic performance and physical education. It includes an analysis of practical and theoretical concepts of nutrition and the effects that dietary intake has on exercise, body composition and athletic performance.

Objectives:
1. To develop a knowledge of the functions of the major nutrients.
2. To understand the interactions between dietary intake, exercise and body composition.
3. To be able to critically evaluate claims about nutrition and food products.
4. To examine current issues in nutrition.
5. To understand the role of nutrition in exercise and athletic performance.

Course Texts:

Maughan, R. J. Burke, L. M. and Coyle, E.F. eds. (2005) *Food, nutrition and sports performance II.* London: Routledge.

Pawlick, Thomas F. (2006). *The end of food: How the food industry is destroying our food supply – and what you can do about it.* Vancouver: Greystone.

Sport Medicine Council of Alberta. (2007) Sport nutrition level 1 workbook. Edmonton: SMCA.

Stampfer, M.J. (2006). *Vitamins and minerals: What you need to know.* Stamford CT: Harvard Medical School.

Evaluation:	Test on Part I:	Physiology of Digestion & Appetite Control	10%
	Part II:	General Concerns: Tests & Assignments, Record Logs	30%
	Part III:	Philosophical/Moral Concerns & Assignments	20%
	Part IV	Specific Concerns	40%
			100%

Course Content: The following topics will be covered in this course.

Introduction & Assignment #1 (Sept. 6)

I. Physiology of Food Digestion and Appetite Control.

II. General Concerns –
- Hydrating the Athlete – SMCA material
- Fueling the Athlete – SMCA material
- Healthy Body Weights – SMCA material
- Competition Nutrition – SMCA material

III. Philosophical/Ethical Concerns of Food Culmination in position papers (Sept. 11, 13, 18, 20).

IV. Specific Concerns re : Sport and Exercise Nutrition – Research and Latest Developments on:
- Energy Balance and Body Composition in Sports and Exercise
- Carbohydrates and Fat for Training and Competition
- Pre-exercise Carbohydrates and Fat Ingestion: Effects on Metabolism and Performance
- Fluid and Fuel Intake During Exercise
- Fluid and Electrolyte Needs for Preparation and Recovery from Training and Competition
- Protein and Amino Acids for Athletes
- Dieting Antioxidants and Exercise
- Dietary Supplements
- Exercise, Nutrition and Immune Function
- Nutritional Strategies to Influence Adaption to Training

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