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

Course Outline PE 2420
Introduction to Nutrition for Exercise and Performance

I. General Information

Instructor: Karie Quinn RD CDE **Phone:** 780-814-2983
Office: K217 **Email:** kquinn8@telus.net

Class Time: Tuesdays and Thursdays 1:00 - 2:20pm
Location: J229
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 Text: Sizer, F. S., Whitney, E. N. and Piche, L.A. (2009). Nutrition Concepts and Controversies (1st Canadian Edition.). Toronto, Canada : Nelson Thomson Learning.

Study Guide: Optional

- Diet Review 15%
  - Due date TBA
- Energy balance assignment 30%
  - Due date TBA
- Midterm Exam 25%
  - October 22nd
- Final Exam 30%
  - TBA Final Exam Week

Grading System: The following system will be used for converting percentage grades to alpha grades.

A+	4.0	90 - 100	***Excellent***
A	4.0	85 - 89	
A-	3.7	80 - 84	***First Class Standing***
B+	3.3	76 - 79	
B	3.0	73 - 75	***Good***
B-	2.7	70 - 72	
C+	2.3	67 - 69	***Satisfactory***
C	2.0	64 - 66	
C-	1.7	60 - 63	
D+	1.3	55 - 59	***Minimal Pass***
D	1.0	50 - 54	
F	0.0	0 - 49	***Fail***

Note: There may be slight deviations from this system in the conversion of percentage grades to alpha grades depending on the grouping of marks within the class.

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

1) Introduction to Nutrition Principles, Diet Planning and the Human Body
   - A Lifetime of Nourishment
   - The Human Body and Its Food
   - The Challenge of Choosing Foods

   - Dietary Guidelines and Nutrition Objectives
   - Diet Planning with the Food Guide
   - Food Labeling
   - Nutrient Recommendations

   - How the Body Works With Nutrition
     - Cardiovascular system
     - Hormonal and Nervous System
     - Immune System
     - Digestive System
     - Excretory System
     - Storage System

2) The Major Nutrients – Physical Activity – Body Responses
   a) Carbohydrates
      - What are they? Types?
      - Functions / Roles / Need For
      - How the body uses CHO's
      - Sources
   b) Fats
      - What are they? Types?
      - Functions / Roles / Need For
      - How the body uses Fats
      - Sources
   c) Proteins
      - What are they? Types?
      - Functions / Roles / Need For
      - How the body uses Proteins
      - Sources
   d) Vitamins
      - Functions / Roles / Need For
      - Types
      - Antioxidants
   e) Minerals
      - Functions / Roles / Need For
      - Types

   f) Water

- Functions / Roles / Need For

3) Energy Balance and Healthy Body Weight
   a) Caloric Intake and Output
   b) Overweight, Underweight and Obesity
   c) Eating Disorders
   d) Losing Weight and Gaining Weight
   e) Achieving a Healthy Body Weight

4) Nutrition and Exercise
   a) Fuel for Exercise
   b) Hydration, Re-hydration
   c) Energy bars and Sport Drinks
   d) Supplements
   e) Special considerations for high performance
      - nutrition before exercise
      - nutrition during exercise
      - nutrition following exercise

5) Diet and Health
   - Nutrition and Immunity
   - Nutrition and Cardiovascular Disease
   - Nutrition and Hypertension
   - Nutrition and Cancer

6) Nutrition and Special Populations
   - Prenatal and Postnatal Nutrition Concerns
   - Children, Teens and Older Adults

7) Philosophical and Moral Concerns
   - Hunger and the Global Environment
   - Philosophical/Ethical Concerns of Food Culmination in position papers