

# **DEPARTMENT OF PHYSICAL EDUCATION AND KINESIOLOGY (PEAK)**

#### **COURSE OUTLINE- WINTER 2013**

PE 2420: INTRODUCTION TO NUTRITION FOR EXERCISE AND PERFORMANCE

**INSTRUCTOR:** Matthew Bain **PHONE:** (780) 539-2974

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**OFFICE HOURS:** By appointment, drop in, or as necessary.

PREREQUISITE(S)/COREQUISITE: NA

REQUIRED TEXT/RESOURCE MATERIALS: Dunford, M., and Doyle, J.A. (2012). Nutrition for sport and exercise (2<sup>nd</sup> ed.). Belmont, CA; Wadsworth, Cengage Learning.

**CALENDAR 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.

CREDIT/CONTACT HOURS: 3 (3-0-0). PE 2420 includes two (2), eighty- minute (80) classes per week: Monday & Wednesday, 2:30-4:00 pm.

DELIVERY MODE(S): This course work will be delivered in a blended format using a variety of teaching methods including lecture, scenarios, in-class worksheets, exams, and nutritional analysis.

# **OBJECTIVES:**

- 1. To develop a basic knowledge of the functions of the major nutrients.
- 2. To understand basic interactions between dietary intake, exercise, and body composition.
- 3. To be able to critically evaluate claims about nutrition and food products.
- 4. To explore the role of nutrition in exercise and athletic performance.
- 5. To be able to effectively use the Food Exchange System, manage the MyPyramid/ eaTRACKER webpage, and develop a working knowledge of key concepts such as Dietary Reference Intakes and calculating such concepts as the Total Daily Energy Expenditure.
- 6. Critically analyze own and others nutritional practices and increase competence to make recommendations.

#### TRANSFERABILITY:

- 1. PEDS 2xxx or NUTR 100 (3 credits)--U of A
- 2. KNES 237 or junior option (3 credits)-- U of C
- 3. 1 unspecified Education option (3 credits)-- U of L

# **GRADING CRITERIA:**

MAJOR PROJECT:	30 %: This will include an analysis of your current diet, exercise
	prescription, and future recommendations related to macro &
	micronutrients. This will also include the construction of nutritional
	and lifestyle recommendations.
EXAMINATIONS	75%: Five written examinations (each worth 15%) will be used in
	this course totaling 75%: These evaluations will be a combination
	of multiple choice, short answer, and scenario to examine learning
	abilities.

<sup>\*\*</sup> 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

**EXAMINATIONS:** Each of these examinations will include the content from the chapters assigned to the exam. Each of these exams may include multiple choice, matching, short answer, and critical thinking materials. The exams will be constructed as follows:

- Examination #1: (15%): This exam will include the first three chapters of the course. It will be based on the coursework addressed during the first three weeks.
- Examination #2: (15%): This exam will include content explored in chapters 4 & 5. This will include Carbohydrate and Protein information and will be on February 25<sup>th</sup>.
- Examination #3: (15%): This exam will include content explored in chapters 6 & 7. This will include Fats and Hydration information and will be on March 11.
- Examination #4: (15%): This exam will include content explored in chapters 8 & 9. This will include Vitamins and Mineral information and will be on March 25.
- Examination #5: (15%): This exam will include content explored in chapter 10 and from the presentation. This will include the Comprehensive Nutrition Plan and information shared from our presentation and will be on April 10.

**MAJOR PROJECT:** This project will be inclusive of all facets of our course from the semester. Topics will include a thorough analysis and recommendations originated from your dietary analysis from the beginning of the semester. This initial analysis will include:

- First submission: (Due January 30, 2013): Using the Supertracker ™ or eaTRACKER™ programs from, <a href="https://www.choosemyplate.gov/SuperTracker/default.aspx">https://www.choosemyplate.gov/SuperTracker/default.aspx</a> or <a href="https://www.eatracker.ca/login.aspx">https://www.eatracker.ca/login.aspx</a> track your dietary practices and exercise practices for a period of Seven (7) days. Once you have completed this, print selected reports for your nutrients and energy balance and write out 10 unique observations and reflections based on the information gleaned from this assignment. (5%)
- Final Submission: (DUE April 15, 2013 on POTLUCK DAY!) (Ensure the use of a MINIMUM of five (5) additional ACADEMIC resources OTHER THAN the text. Cite using APA format.)
  - This submission must include the following contents:
    - Comprehensive Profile: Your profile will be presented to be examined, broken down, explored, reconstructed, and presented with a greater depth of content. This section will include relevant health-related information such as age, height, weight, previous exercise history, health-related information, and various other characteristics relevant to the examination of a nutritional profile.
    - 2. **Exercise Recommendations:** These recommendations will come from the calculation of such concepts as the Resting Metabolic Rate, Estimated Daily

Energy Needs, and predicted exercise caloric costs based on current and future recommendations. Exercise prescription (basic) can also be made at this time in order to align the nutritional recommendations with your needs. Also included in these recommendations is the identification of your specific desires (i.e., weight loss, gain, or maintenance) and repercussions of said exercise prescription on short and long term recommendations. This section should include the appropriate exercise principles.

- 3. Macronutrient Recommendations: These recommendations require the individual to explore the carbohydrate, fat, and protein needs of your own personal lifestyle. This will include specific recommendations, reasons for the recommendations, and the identification of possible outcomes and considerations given the recommendations. This may also include a brief application of basic digestive processes in order to demonstrate competence in this area. May also include examination of supplementation.
- 4. **Micronutrient Recommendations:** These recommendations require the individual to explore the vitamin, mineral, and hydration needs of your own personal lifestyle. This will include specific recommendations, reasons for the recommendations and the identification of possible outcomes and considerations given the recommendations. This may also include a brief application of basic digestive processes in order to demonstrate competence in this area. May also include examination of supplementation.
- 5. Food Recommendations, Lifestyle Adjustments, or Otherwise specific methods for HOW you will achieve these outcomes from above: These recommendations include considering the macro and micronutrient demands. This includes alternatives to several recommendations, and the ability to demonstrate why these recommendations have come about.

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GRADING CONVERSION CHART						
Alpha Grade	4-point	Percentage	Designation			
	Equivalent	Guidelines				
$\textbf{A}^{^{+}}$	4.0	90 – 100	EXCELLENT			
Α	4.0	85 – 89				
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING			
B⁺	3.3	77 – 79				
В	3.0	73 – 76	GOOD			
B <sup>-</sup>	2.7	70 – 72				
C <sup>+</sup>	2.3	67 – 69				
С	2.0	63 – 66	SATISFACTORY			
C⁻	1.7	60 – 62				
D <sup>+</sup>	1.3	55 – 59	MINIMAL PASS			
D	1.0	50 – 54				
F	0.0	0 – 49	FAIL			
WF	0.0	0	FAIL, withdrawal after the deadline			

# **STUDENT RESPONSIBILITIES:**

- All assignments must be submitted in typed format adhering to ALL APA format requirements.
- Students MUST participate and complete all assignments and examinations in order to receive a passing grade in this course. The incompletion of any of the assigned learning activities may result in the assignment of a failing (F) grade.
- Assignments are due on the dates established by the instructor. Extensions may be offered
  in lieu of SIGNIFICANT student issues and concerns as determined by the instructor. ALL
  extensions requests MUST be submitted to the instructor prior to the due dates.
   Percentage penalties will be applied up to 100 % of the assignment grade if assignments
  are submitted late.

Regular attendance is a integral to success in this course. Classroom activities support
student comprehension of materials, content clarification, relevant peer questions and
support, and finally, role clarification. It is the student's responsibility to acquire the
material missed and to complete assigned readings, in-class work, and assigned
homework.

### STATEMENT ON CELL PHONE AND OTHER PERSONAL ELECTRONIC DEVICES:

- Users of cell phones and other personal electronic devices must be attentive to the needs, sensibilities and rights of other members of the College community. The use of these devices must not disrupt the functions of the College overall and its classrooms and labs. Instructors have the right to have strict individual policies related to cell phones in order to provide and maintain a classroom environment that is conducive to learning and the respect of others.
- Cell phones, PDAs and pagers must be turned off and placed out of sight in classrooms and computer labs during instructional time. Devices can be turned on and set to silent mode only with the expressed consent of individual instructors.
  Sending or receiving text messages or gaming on a cell phone during class is not acceptable. In addition, cell phones and other personal electronic devices incorporating cameras must be turned off and out of sight in any area in which individuals have reasonable expectations of privacy. This includes classrooms and computer labs.
- If cell phones, pagers, calculators, recorders, digital cameras, PDAs, MP3 players or other personal electronic devices are used inappropriately for the purposes of cheating or academic dishonesty, then students who do so will be penalized appropriately under the Academic Honesty policy of Grande Prairie Regional College.

# STATEMENT ON PLAGIARISM AND CHEATING:

Refer to the Student Conduct section of the College Admission Guide 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="http://www.gprc.ab.ca/about/administration/policies/\*\*">www.gprc.ab.ca/about/administration/policies/\*\*</a>

\*DIETARY ANALYSIS SUBMISSIONS: This work will be closely monitored for ANY plagiarism or duplication. Students are encouraged to discuss research they have discovered with others who have read the same article or used the same text material. Students caught plagiarizing or duplicating others work will both be dealt with to the full capacity of the policies outlined as per the administrative policies for the GPRC.

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

# COURSE SCHEDULE/TENTATIVE TIMELINE:

WEEK	TOPIC	ASSIGNED	EXAMINATION	ASSIGNMENT
		READINGS	DATES	DATES
January 9	Course Introduction			
January 14 & 16	Introduction to	Chapter 1		
	Sports Nutrition			
January 21 & 23	Exercise	Chapter 2 & 3		
	Investigation			
January 28 & 30	Exercise	Chapter 2 & 3	Exam # 1: January	January 28 :
	Investigation		30 <sup>th</sup>	MyPyramid or
				eaTRACKER food
				analysis
February 4 & 6	Carbohydrates	Chapter 4		
February 11 & 13	Proteins	Chapter 5		
February 18 & 20	Reading Week	No Assigned		
		Readings		
February 25 & 27	Fats	Chapter 6	Exam # 2: February	
			25	
March 4 & 6	Hydration	Chapter 7		
March 11 & 13	Vitamins	Chapter 8	Exam # 3: March 11	
March 18 & 20	Minerals	Chapter 9		
March 25 & 27	Health Related	Chapter 10	Exam # 4: March 25	
	Behaviors			
April 1 & 3	Health-Related	Chapter 10		
	Behaviors			
April 8 & 10		No class April 8	Exam # 5: April 10	
April 15	Potluck!!!			April 15: Submission
				for Major Project