



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

**COURSE OUTLINE- FALL 2012**

**PE 2420: INTRODUCTION TO NUTRITION FOR EXERCISE AND PERFORMANCE**

**INSTRUCTOR:** Matthew Bain

**PHONE:** (780) 539-2974

**OFFICE:** K 221

**E-MAIL:** mbain@gprc.ab.ca

**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: Tuesday & Thursday, 1:00-2:20 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

**\*\* 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:**

<b>Dietary Analysis (Self)</b>	<b>20 %: This will include an analysis of your current diet, exercise prescription, and future recommendations. This will also include the construction of a nutrition program using the Food Exchange System. This is due in three parts throughout the semester.</b>
<b>Examinations</b>	<b>40%: Two written examinations will be used in this course totaling 40%: These evaluations will be a combination of multiple choice, short answer, and scenario to examine learning abilities.</b>
<b>Scenario Examinations</b>	<b>40%: Two Scenario Examinations will be used in this course totaling 40%: These will be guided learning experiences and submitted on various dates throughout the semester.</b>

**DIETARY ANALYSIS (SELF):** This assignment requires the student to record, assess, and critically explore their diet over the course of a 5-day period of time. This assignment is meant to provide the student with a comparison of dietary practices. The analysis requires the student to compare their current practices with relevant information and summarize by reflecting on changes they could make and decisions that reflect consistency from the course content throughout the semester. The student is expected to use the text materials to support their recommendations as well as the Food Exchange System for constructing their diet.

- **First submission: (Due September 20, 2012):** Using the Supertracker™ or eaTRACKER™ programs from, <https://www.choosemyplate.gov/SuperTracker/default.aspx> or <https://www.eatracker.ca/login.aspx> track your dietary practices and exercise practices for a period of Five (5) days. Once you have completed this, print the reports for your nutrients and energy balance and write out 5 unique observations and reflections based on the information gleaned from this assignment. (5%)
- **Second Submission (Progress Check): (Due November 6th, 2012):** Throughout the semester, record information that will aid in a well planned nutritional profile. (10%)
  - 10 recommendations substantiated with additional support (Not required to have 10 at the progress check but a reference list should be constructed).
  - Ensure the use of a MINIMUM of five (5) additional resources OTHER THAN the text.  
**Cite using APA format.**
- **Third and FINAL Submission: (Due December 6th, 2012):** The third submission will include, using your recommendations, your own 5-day meal plan using the Food Exchange System (Appendix D), and supporting your recommendations with text materials. (5%)

**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 (similar to our scenarios). The exams will be constructed as follows:

- *Examination #1: (10%):* 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: (30%):* This exam will include all content explored throughout the course. This exam will be broken up into two parts and will be a combination of multiple choice, matching, short answer (Part A), and a scenario question associated with the learning practices from the course (Part B).

**SCENARIO EXAMINATIONS:** Each of these examinations will encompass information from the chapters explored with regards the scenario. Members will be expected to examine chapter content and apply the principles to the scenario given to them at the start of the week. These examinations will be completed in small teams (6-8) with time given during each class to critically assess information and determine the most appropriate information. Each submission is worth 20%.

1. **Comprehensive Profile:** A profile will be presented to the team to be examined, broken down, explored, reconstructed, and presented with a greater depth of content. This profile 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 TDEE, REE, and EAR based on current and future recommendations. Exercise prescription (basic) can also be made at this time in order to align the nutritional recommendations with the client needs. Also included in these recommendations is the identification of client desires (i.e., weight loss, gain, or maintenance) and repercussions of said exercise prescription on short and long term recommendations.
3. **Macronutrient Recommendations (if relevant):** These recommendations require the teams to explore the carbohydrate, fat, and protein needs of their client. 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.
4. **Micronutrient Recommendations (if relevant):** These recommendations require the teams to explore the vitamin, mineral, and hydration needs of their client. 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.
5. **Food Exchange Recommendations and Construction:** These recommendations include considering the macro and micronutrient demands of the client you are working with. This includes alternatives to several recommendations, and the ability to demonstrate why these recommendations have come about.

**LEARNING BEHAVIORS:** This grade is assigned by your PEERS regarding your attendance, engagement, and participation in the learning process. This participation grade is included within each of the scenario submissions and will be worth 10% of the weighting.

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation
A <sup>+</sup>	4.0	90 – 100	EXCELLENT
A	4.0	85 – 89	
A <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING
B <sup>+</sup>	3.3	77 – 79	
B	3.0	73 – 76	GOOD
B <sup>-</sup>	2.7	70 – 72	
C <sup>+</sup>	2.3	67 – 69	SATISFACTORY
C	2.0	63 – 66	
C <sup>-</sup>	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 incompleteness 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

<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/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

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

**\*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.

## **COURSE SCHEDULE/TENTATIVE TIMELINE:**

<b>WEEK</b>	<b>TOPIC</b>	<b>ASSIGNED READINGS</b>	<b>EXAMINATION DATES</b>	<b>ASSIGNMENT DATES</b>
September 6	Course Introduction			
September 11 & 13	Mini-Scenario & Text Familiarization	Chapter 1		
September 18 & 20	Exercise Investigation	Chapter 2 & 3		September 20: MyPyramid or eaTRACKER food analysis
September 25 & 27	Mini-Scenario & Exercise	Chapter 2 & 3	Exam # 1: September 25, 2012	
October 2 & 4	Research & Application	No assigned readings		
October 9 & 11	Carbohydrates	Chapter 4		
October 16 & 18	Proteins	Chapter 5		
October 23 & 25	Fats	Chapter 6		
October 30 & November 1			SE #1: DUE November 1, 2012	
November 6 & 8	Hydration	Chapter 7		Nov 6: Dietary Analysis Second Submission
November 13 (no classes) & 15	Vitamins	Chapter 8		

<b>November 20 &amp; 22</b>	<b>Vitamins/ Minerals</b>	<b>Chapter 9</b>		
<b>November 27 &amp; 29</b>	<b>Minerals</b>		<b>SE #2: DUE November 30, 2012</b>	
<b>December 4 &amp; 6</b>	<b>Exam Review &amp; Food Exchange Planning</b>	<b>POTLUCK on DECEMBER 6<sup>th</sup>!</b>		<b>December 6: Final Dietary Analysis Due</b>
<b>December 11</b>			<b>Final Exam: Part A: December 11 (Part B TBD)</b>	