

**GRANDE PRAIRIE REGIONAL COLLEGE
DEPARTMENT OF PHYSICAL EDUCATION, ATHLETICS, AND KINESIOLOGY**

**PF 2230 (3)
Nutrition and Pharmacology for Active Older Adults
(45 hours; 3-0-0)**

**Winter 2010
Course Outline**

INSTRUCTOR: Melanie Hamilton RN, BN, MN

OFFICE: H215

OFFICE PHONE: 780-539-2761

VIRTUAL OFFICE HOURS: By Appointment via Elluminate.

Email appointment requests to your instructor

EMAIL: mhamilton@gprc.ab.ca

COURSE DESCRIPTION:

This course covers effects and considerations for activity related to the range of pharmaceuticals that older adults may have been prescribed as well as the consequences of varying nutritional needs for older adults.

COURSE OBJECTIVES:

- Describe prescription medication
- Explain why it is important to screen for medications in the older adult
- Discuss how medications affect the Older Adult
- Define over the counter (OTC) medications
- Identify why the Older Adult may use herbal remedies and vitamins
- Explain the polypharmacy
- List situations when an older adult has multiple prescriptions
- Identify causes of pain in the Older Adult
- Differentiate between OTC and Prescription Pain medications
- Describe why the Older Adult may use anti-inflammatory medications
- Name common medications prescribe for cardiovascular disease and hypertension
- List common medications prescribe for Asthma and other respiratory conditions
- Explain medications that are prescribed for diabetes
- Identify signs and symptoms of hyperglycemia and hypoglycemia
- Describe menopause in relation to the Older Adult
- Explain how active aging can help with menopausal symptoms
- Identify various Hormone Replacement Therapies
- Debate Hormone Replacement Therapies

- List common steroids
- Recognize the difference between anabolic steroids and steroids used to treat chronic medical conditions
- Identify and discuss the banned substances and the Master Athlete
- Identify nutritional requirements unique to Middle adults ages 45-64 years
- Identify nutritional requirements and dietary needs for the Older Adult ages 65 years and older
- Describe physiological changes and nutrition of the Older Adult
- Determine Health Promotion Strategies and Reduction of Risk for Chronic Disease related to the Older Adult
- Describe healthy dietary habits related to Vitamin D
- Describe necessary fibre requirements and the Older Adult
- Explain how healthy eating and cancer prevention are related
- Describe healthy dietary habits related to cardiovascular disease and strokes
- Identify healthy dietary habits related to arthritis and osteoporosis
- Determine healthy dietary habits related to diabetes and obesity
- Describe healthy dietary habits related to cardiovascular disease and strokes
- Identify healthy dietary habits related to arthritis and osteoporosis
- Determine healthy dietary habits related to diabetes and obesity
- Specify dietary requirements for muscle action and fuel
- Determine dietary needs for fluid and energy
- List macronutrient and micronutrients in relation to exercise
- Recognize dietary requirements during training and competition
- Identify factors that would prevent an Older Adult from healthy eating
- Discuss concerns of the Older Adult and eating alone
- Outline strategies for the Older Adult and shopping for proper nutrition
- Explain fad diets and the relation to the Older Adult
- Explain the importance of oral and dental health in the Older Adult
- Identify community supports for the Older Adult and healthy eating
- Compare a variety of nutrition screening tools to use with the Older Adult

REQUIRED TEXTS:

Taylor, A. W., & Johnson, M. J. (2008). *Physiology of Exercise and Healthy Aging*. Human Kinetics: Ontario.

Vople, S. L., Sabelawski, S. B., & Mohr, C. R. (2007). *Fitness nutrition for special dietary needs*. Human Kinetics: Ontario.

WEB BASED SOFTWARE:

This course will use *Moodle*, <http://moodle.gprc.ab.ca>, a computer-mediated communication (CMC) web-based software system. Learners who are new to Moodle should contact the Moodle Help Desk at: edtechrequests@gprc.ab.ca for orientation.

This course also uses *Elluminate*, <http://elluminate.gprc.ab.ca>, a real-time web-conferencing system. You will be provided with *Elluminate* instructions in the Program Information site.

COURSE STRUCTURE:

The course is structured into 6 modules over twelve weeks followed by a self-assessment. Each Module lasts approximate two weeks. You are to proceed through the course by completing the modules in sequence as outlined below.

Module 1:	Week 1: Understanding Pharmacology Week 2: Over the Counter Medication and Polypharmacy
Module 2:	Week 3: Analgesics and Anti-inflammatories Week 4: Prescription Medications and Diabetic Medications
Module 3:	Week 5: Menopause and Hormone Replacement Therapy Week 6: Steroid Use and Active Aging Assignment #1 Due
Module 4:	Week 7: Nutrition: Basic Concepts to Healthy Eating Week 8: Specific Nutritional Requirements and Cancer Education in the Older Adult Assignment #2 Due
Module 5:	Week 9: Special Diets in the Older Adult Week 10: Dietary Needs during Exercise

Module 6:	Week 11: Social Concerns During Eating Week 12: Community Support for Nutrition in the Older Adult <i>Assignment #3 Due</i>
Course Wrap-up	Week 13: Self Assessment <i>Assignment #4 Due</i>

ASSESSMENT:

1. **Hormone Replacement Therapy Position Paper– 30%**

The purpose of this paper is to take a position either *to support* or *to discredit* HRT. You will be required to present both arguments for HRT and then choose a side that you believe to be more true to your own beliefs. It is expected that you will provide evidence to support your side of the argument.

2. **Cancer Education Assignment- 30%**

For the purposes of this assignment you will be required to choose a common form of cancer that affects either men/women or both. You will be required to research the cancer you chose and write a 4-5 page paper and discuss nutritional strategies for cancer prevention. It is important to include the following components in your paper:

1. introduction of the cancer that you choose
2. what group does it affect (age, gender)
3. what are the cancer statistics (morbidity and mortality)
4. what are the nutritional strategies regarding to prevention of cancer
5. are there any other strategies that you should include regarding health promotion and illness prevention
6. include one peer reviewed journal article to support your ideas

3. **Health Determinants Assignment-25%**

For the purpose of this assignment you will be required to interview an Older Adult that has been diagnosed with one of the following chronic diseases:

1. Diabetes (Type 1 or Type 2)
2. Cardiovascular Disease
3. Hypertension
4. Osteoporosis

Interview your client to see what his or her weekly diet habits are like. Once you have completed the interview, compare your client's diet with the diets suggested by the literature you have read and information provided to you in this course.

In a 4-5 page paper, provide information about your client's diet. Answer the following questions: Was your client following the recommended diet? If not, what could be changed regarding your client's diet?

4. **Self Assessment – 15%**

Typically, a learner knows where his/her learning occurred/did not occur and whether or not this was attributable to the learner, the situation, or method of delivery. You will be expected to submit a 1-2 page (double spaced) self-assessment summarizing the learning that occurred or did not occur and what attributed to the learning or lack thereof. Conclude your assessment by submitting what you think your overall letter grade should be for this course.

Grading will follow these GPRC approved guidelines as closely as possible:

<u>Alpha Grade</u>	<u>4-pt Equivalent</u>	<u>Percentage Guidelines</u>	<u>Designation</u>
A+	4.0	90-100	Excellent
A	4.0	85-89	Excellent
A-	3.7	80-84	First Class Standing
B+	3.3	76-79	First Class Standing
B	3.0	73-75	Good
B-	2.7	70-72	Good
C+	2.3	67-69	Satisfactory
C	2.0	64-66	Satisfactory
C-	1.7	60-63	Satisfactory
D+	1.3	55-59	Poor
D	1.0	50-54	Minimal Pass
F	0.0	0-49	Fail



ASSIGNMENT POLICY:

All assignments are expected to be digitally handed in at the time they are due. Extensions on assignments may be granted and must be negotiated with the instructor prior to the due date and with a date specified for late submissions.

A penalty of one letter grade per day will be deducted from the final mark of a late assignment. For example, a paper graded at a C would receive an adjusted grade of C- if handed in one day late. Late assignments are due by 1600 hours.

STUDENT RIGHTS AND RESPONSIBILITIES:

Please refer to the Student Rights and Responsibilities policy in the Grande Prairie Regional College Calendar or at

<http://www.gprc.ab.ca/downloads/documents/StudentRightsandResponsibilities.pdf>

PLAGIARISM AND CHEATING:

We expect honesty from our students. Penalties will be given according to the degree of the plagiarism or cheating. **If you are unsure whether an action is plagiarism or not, please consult your program advisor.** For additional information, please refer to your GPRC Calendar or

<http://www.gprc.ab.ca/downloads/documents/Student%20Misconduct%20Plagiarism%20and%20Cheating.pdf>

PROGRAM INFORMATION:

Please view your Moodle Program Information site, <http://moodle.gprc.ab.ca>, for additional information including Technical Requirements, additional Elluminate information, and Netiquette. A link to your Program Information site is provided in the course information section of each course.