

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

**PF 2220
Lifestyle Assessment and Exercise Prescription for Older Adults
45 hours; 2-0-1**

**Winter 2010
Course Outline**

INSTRUCTOR: Kathy Nilsson
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VIRTUAL OFFICE HOURS: By Appointment via Elluminate - TBD
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COURSE DESCRIPTION:

This course includes examination and application of normative and more successful aging using bio-psycho-social assessments, health measurement and fitness instruments, individual observations, and population surveys.

PREREQUISITE:

PE 1100 and PF 2900.

COURSE OBJECTIVES:

- Be able to identify the functional benefits of exercise and specific exercise principles for older adults.
- Know all the steps and protocol of the pre-exercise and health screening, then be able to perform these steps in a practice setting.
- Recognize the role of the preliminary assessments.
- Know how to prepare for, perform, interpret and apply results of the preliminary assessments.
- Discuss the value of self-efficacy measurement tools.
- Complete an overview of Assessment tests and considerations for selecting the proper assessment tool.
- Know how to administer, interpret and apply the results for exercise prescription from the Senior Fitness test.
- Know how to administer, interpret and apply the results for exercise prescription from the Fullerton Advanced Balance Scale

- Be introduced to a number of different field assessment tests, in such a manner that you will be able to understand the intent of the test, the target population, the process for administering the test and interpret the results for exercise prescription.
- Know how to administer, interpret and apply the results from a number of different assessment tests for cardio-respiratory function.
- Review the procedures of body composition measurements (as learned from PF2900), and the special considerations for taking body composition measurements of older adults.
- Know how to administer, interpret and apply the results from a number of different assessment tests for muscle strength.
- Know the different methods to acquire balance measurements in a laboratory setting, then know how to interpret and apply the results for exercise prescription.
- Be able to outline specific warm-up & cool-down exercise principles for older adults.
- Identify specific safety recommendations of warm-ups, cool-downs and flexibility training for older adults.
- Outline specific flexibility training principles for older adults
- be able to construct an exercise training program in respect to warm ups, cool-downs and flexibility training for an older adult.
- Be able to outline resistance training principles for older adults.
- Identify specific safety recommendations of resistance training for older adults.
- Review the training aspects of the Fit For Your Life program.
- Be able to construct an exercise training program in respect to resistance training for an older adult.
- Be able to outline aerobic training principles for older adults.
- Identify specific safety recommendations of aerobic training for older adults.
- be able to construct an exercise training program in respect to aerobic training for an older adult.
- Be able to outline balance training principles for older adults.
- Identify specific safety recommendations of balance training for older adults.
- Interact with certain training aspects of the Fall Proof Program.
 1. Postural Strategy Training
 2. Gait Variation Enhancement and Variation Training
- be able to construct an exercise training program in respect to balance training for an older adult.
- Be able to incorporate goal setting practices for the older adult participant.
- Recognize different leadership skills & tips.
- Discuss aspects of class planning and marketing your program.
- Outline program design principles and practice how to manage and lead group classes
- Discuss the important concepts that relates to legality, risk management and ethics.

REQUIRED TEXTS:

American Council on Exercise. (2005). C.X. Bryant & D.J. Green (Eds.) *Exercise for older adults: ACES's guide for fitness professionals (2nd Ed)*. San Diego, CA: American Council on Exercise.

Jones, C. J., & Rose, D. J. (2005). *Physical activity instruction of older adults*. Windsor, ON: Human Kinetics

Rose, D.J. (2003). *Fall proof!* Windsor, ON: Human Kinetics.

Spirduso, W., Francis, L., MacRae, P. (2005). *Physical dimensions of aging (2nd ed.)* Windsor, ON: Human Kinetics.

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: moodle@gprc.ab.ca for orientation.

This course also uses *Elluminate*, <http://illuminate.gprc.ab.ca>, a real-time web-conferencing system. You will be provided with log-in information and instructions in the course information section of this course.

COURSE STRUCTURE:

The course is structured into 6 modules over 13 weeks. 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: Introduction & Pre-exercise and Health Screening Week 2: Preliminary Assessments <i>Module 1 Assignment Due</i>
Module 2:	Week 3: Field Based Assessment Tests Week 4: Additional Field Based Assessment Tests. <i>Module 2 Assignment Due</i>

Module 3:	<p>Week 5: Laboratory Based Assessment Tests for Cardio-respiratory function and body composition</p> <p>Week 6: Laboratory Based Assessment Tests for Muscle Strength and Balance <i>Module 3 Assignment Due</i></p>
Module 4:	<p>Week 7: Warm-ups, Cool-downs & Flexibility Training for Older Adults.</p> <p>Week 8: Resistance Training for Older Adults <i>Module 4 Assignment Due</i></p>
Module 5:	<p>Week 9: Aerobic Training for Older Adults</p> <p>Week 10: Balance Training for Older Adults</p>
Module 6:	<p>Week 11: Program Planning and Class Structure</p> <p>Week 12: Putting it all together <i>Module 5/6 Assignment Due</i></p>
Course Wrap-up	<p>Week 13: Self Assessment</p> <p><i>Self Assessment Due</i></p>

ASSESSMENT:

1. **Class Discussion Participation – 20%**

Throughout the course there are many discussion forums that you must contribute to. Please refer to the **Program Information Page** and review the **Discussion Board Rubric** and **Netiquette: Appropriate Network Etiquette** prior to posting within a discussion board.

Participation in the Elluminate sessions is required of all students. If there is an unforeseen reason you are not able to attend an Elluminate session advanced notification to the course facilitator is requested. In the event that you miss an Elluminate session, you will be given access to a recorded copy of the Elluminate session that you missed.

2. **Module 1 Assignment - 15% (Due Date-Jan. ??th)**

As you have noticed from your readings, there is a 5 step process in conducting pre-exercise and health screening. Your assignment will require you to develop your own pre-exercise and health screening documents for steps 1, 3 and 4. You will produce your own consent form, physician consent form and health history and activity questionnaire. Be sure to give a brief description of the program you are offering and under what context (community group programming, one on one personal training or assisted care activity programming).

3. **Module 2 Assignment - 15% (Due Date-Jan. ??th)**

You will submit an assignment as it relates to the Senior Fitness Test and the Fullerton Advanced Balance test. First you will need to find a volunteer, a friend or a family member who you believe who can complete these tests without any difficulty or harm physically. This participant does not have to be an older adult, as you will be using this opportunity to try and practice the steps covered from the texts.

Based on the information you gathered from the reading sources and any additional sources you can find on the Senior Fitness Test and the Fullerton Advanced Balance test, you are to conduct each of the tests with your volunteer. Record their scores, compare their results to the norms (which will most closely match the youngest age group) and interpret their results. You will not outline any exercise recommendations for your volunteer, as this assignment is to provide you with the opportunity to practice administering the tests. Also, your volunteer is most likely not an older adult over 60, thus the exercise recommendations would not be applicable for your volunteer. Due to equipment access, you may not be able to conduct a few of the tests, please specify in your assignment if this is the case, however; you may be able to make a slight modification with the test, such as the type of foam used for one of the tests in the Fullerton Advanced Balance test. Upon completion of the tests, please provide your thoughts, comments and possible concerns on the process of administering these tests for an older adult.

4. **Module 3 Assignment - 15% (Due Date-Feb. ??th)**

For this assignment you will follow the testing protocol for the Balke-Ware Treadmill Test and the Astrand-Ryhming Leg Cycle Ergometer Test as outlined in the Jones & Rose text chapter 7. The second part of this assignment will require you to perform the 1RM strength test protocols for both chest press and leg press.

As a practice, you will first go through the testing procedures with yourself, you will most likely need to do some self talk as you practice what to say for when you provide instructions for a client. Be sure to do this practice time with all of the tests:

1. Balke-Ware Treadmill Test
2. Astrand-Ryhming Leg Cycle Ergometer Test
3. 1 RM Strength test - Chest Press
4. 1 RM Strength test - Leg Press

Next you will perform these tests with a volunteer, a friend or a family member who you believe can complete these tests without any difficulty or harm physically. This participant does not have to be an older adult, as you will be using this opportunity to try and practice the steps covered from the texts.

You will report on the process of administering these test, what you have learned, how did your client respond to your instructions, what you believe you did correct and what you would modify for next time? Do you feel that you were conscious of your volunteers safety throughout the whole process?

5. **Module 4 Assignment - 15% (Due Date-Feb. ??th)**

You will develop the warm-up and cool-down components of an exercise program, incorporating a flexibility segment into the cool-down. Not only will you outline the exercises, you will need to list all of the equipment required for the exercises and the music you plan to use. You have the choice for which functional level of older adult you are producing this program for and through which mode (standing vs. chair exercises).

6. **Module 5/6 Assignment - 15% (Due Date-Mar. ??th)**

Compile all the training aspects you have learned to this point to create a generalized exercise session that incorporates all training modalities. You will use the warm-up, cool-down and flexibility components that you have already completed for Module 4 Assignment and will now add the body of the exercise session. The body of the exercise session is to include an aerobic component, resistance training component and balance component. Be sure to design this program for the same functional level of older adult that you used when you created your warm-up, cool-down and flexibility module 4 assignment. Be sure to be mindful that this compiled exercise session does not become too long for an older adult to complete. Therefore, as you design this exercise lesson be sure to outline how long the class is going to be, what equipment you will need, the music you intend to use and other important planning information. Please note, information covered within Module 6 will help in completing this assignment.

Once you have your lesson plan complete, you will lead a volunteer through your exercise session. Once again make sure your volunteer is a friend or family member who you know can participate in the lesson safely with no potential risks of harm or injury. You will report on the process of delivering the lesson plan, what ques will you use and what adaptations and recommendations would you tell your class as you progress from one exercise to another. After leading the exercise session you will reflect on the planning process and the delivery of the lesson: What are your thoughts on the whole process?
Do you feel the exercises you selected were appropriate?
What feedback does your volunteer have on the lesson?
What did you like about your lesson, and what would you change?

7. **Self Assessment – 5% (Due Date-April ??nd)**

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 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

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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.