Course: HH/KINE4646  Delivering Exercise to the Aging: *Knowledge to Action*

Term: Winter- 2017

Prerequisite / Co-requisite: Prerequisite: HH/KINE 1020 6.00 Pre/Co-requisite: HH/KINE 4010 3.00

Course Instructor: Dr Bob Grisdale
342 Bethune College
gris@yorku.ca  Office hours: TBA & by appointment

Time and Location
Classes Monday AND Wednesday 1:00pm -2:30 pm  CC108

Expanded Course Description

Statement of Purpose:
Delivering Exercise to the Aging: a continuum from evidence-based knowledge to clinical application. Students first review current knowledge of age-related physiological, social and psychological changes confronting individual and population health. Next studied are the attenuating effects of exercise. Finally, students apply the Knowledge Translation framework to design and present a program to meet the needs of an aging cohort in their community.

Organization of the Course

The lecture/discussion format provides only one of the opportunities for learning. The course textbook, assigned readings and other information noted on the course MAP (see Course Webpage below) and during class provide the basis of examinable course material. The purpose of the lectures (ppt, pdf) shared on the course MAP is to place emphasis and context to the material and resources associated with the textbook and assigned readings.

Lectures posted should not be considered adequate to gain a sufficient understanding of the course material. The examinable material consists of assigned text chapters, reserved readings and associated resources and concepts that are presented within them. Additional information such as web-based material, audio-visual presentations, and current events material are included to demonstrate “real-world” applications of the text and its associated material.
Course Learning Objectives

Learning and Teaching Philosophy

*I have come to feel that the only learning which significantly influences behaviour is self-discovered, self-appropriated learning*

Carl Rogers, *Freedom to Learn*

The Specific Learning Objectives of the course are that students will be able to:

- review and consolidate the human physiological systems and the morphological, structural and biochemical alterations that occur with aging.
- review adaptive changes that occur with exercise and be able to distinguish possible benefits insofar as attenuating the aging process (and its associated morbidity, mortality, individual and societal effects) is concerned.
- understand the range of sociological, psychological, environmental and biological factors associated with aging and activity;
- identify the secondary effects of aging from a sociological and psychological perspective, and keep them in mind when identifying potential interventions for the elderly.
- consider the "real-world" considerations of primary contact healthcare providers (sports medicine, performance psychology, pharmacology) who currently address the needs of the aging population - - from guest lecturer encounters.
- evaluate current activity-based interventions available for the elderly and demonstrate an ability to apply theory to practice in the context of case studies related to aging and physical activity and;
- develop their ability to discuss and write about active ageing issues and opportunities.
- apply their own healthcare solution:
  - in consideration of the learned experiences listed above, students will design, write about and present their own version of a “deliverable” active-living based intervention targeted to the unique, physiological, social circumstance and psychological context of a particular aging population.

Course Webpage:
The course is available on Moodle in a web page *Clickable Map* format. To access the course materials go to the Moodle Navigation pane and click on *Clickable Course MAP*. The course contents and chronology move in a clockwise direction on the MAP. You can access lectures, readings and links directly.
Textbook and Reading Materials

The core reading material for the course consists of:

1. Textbook: (*Physiology of Exercise and Healthy Aging*)

   Physiology of Exercise and Healthy Aging  
   By Albert Taylor, Michel Johnson © 2008 Hardback Book  304 pages  
   Available in the Bookstore. No eVersion

   AND

2. Assigned Readings and Exercises (on MAP).

On Reserve ([link](#))

Additional readings and texts, to assist with Assignment Essay and Presentation, are on Reserve in the Stacie Science Library.

Classes and Reading Schedule

**Weeks 1 – 6**

- Introduction and Overview:  
  - A: Knowledge  
  - Physiological, Sociological & Psychological Factors of Aging.  
    1. Knowledge to Action – in part – topics and readings – in class  
    2. Physical Activity and Health: – in part – topics and readings – in class  
    3. Physiology, Aging, Physical Activity  
      1. Systems Review: (self-study/review only)  
      2. Physiological Systems, Age-Related Change and Physical Activity

**Week 6 – Workshop/Seminar**  
Clara Fitzgerald – UWO Centre for Activity and Aging

- Cardiopulmonary System  
  - Ch. 1
- Musculoskeletal System  
  - Ch. 2

**Week 8 Midterm test in class – Wednesday October 26**

- Nervous System  
  - Ch. 3
- Sensory Systems  
  - Ch. 4

**Week 10**

3. Social and Psychological  
   - Aging and Activity: Theories and Meanings  
   - Stereotypes of Aging  
   - Successful Aging  
   - Older Athletes

...to end….TBA....
Course Evaluation

<table>
<thead>
<tr>
<th>Assessment item</th>
<th>Percentage</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted Draft Program Proposal</td>
<td>2</td>
<td>February 13 via Turnitin</td>
</tr>
<tr>
<td>In-Class Quiz/Progress Reflections short written answers about various issues/questions raised in class – 15 min max. Provided at beginning of class – no late starting.</td>
<td>8</td>
<td>Throughout</td>
</tr>
<tr>
<td>Midterm Exam – Short Answer/Essay Includes material covered from the beginning of the course to the class before the test date.</td>
<td>25</td>
<td>Monday Feb 27 – in class</td>
</tr>
<tr>
<td>Final Written Program Project</td>
<td>35</td>
<td>Last week of class. via Turnitin.</td>
</tr>
<tr>
<td>5 min ‘Pitch’</td>
<td>5</td>
<td>TBA</td>
</tr>
<tr>
<td>Final Exam - Short Answer/Essay Cumulative</td>
<td>25</td>
<td>TBA</td>
</tr>
</tbody>
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Test/Exam Absence - Students must notify the instructor (in-person/email) and note the following:
There will not be a make-up for a missed Midterm. Documentation is required for missing a midterm. The missed midterm weighting will be added to the weighting of the final exam.

Final Exam (cumulative):
If students fail to write the Final Exam, students must write a Deferred Final Exam. The Deferred Final Exam will be after York University’s official final exam period for the semester. To be eligible to sit the Deferred Exam, students are required to:
1. Provide adequate documentation as to why the Final Exam was missed;
2. Complete the Deferred Exam Form (http://www.registrar.yorku.ca/pdf/deferred_standing_agreement.pdf)
The Deferred Final Exam will be cumulative.

Assignment/Written Project

Part A: Draft Proposal [2%]
To be discussed.

Part B: Written Project [35%]
This consists of a critical evaluation of a known/existing or self-designed activity-based program targeting identified needs of a senescent population. Use the course resources such as the knowledge-to-action framework, and apply a critical-thinking approach to determine if your ‘program’ makes use of current evidence-based knowledge of exercise science, physiology and social psychology in the ‘real-world’ context of the aging individual. In the context in which physical activity participation rates are poor but the need is high, your program must be designed to succeed and you must show how that will be done.

You should incorporate, but not be limited to, the following:
- Key initial step is a considered, thoughtful structure that reflects the approach of the course (knowledge to implementation) in the context of the specific type of program or activity intervention you have chosen.
  - You may approach this by asking questions such as:
    - What is the current problem/issue?
    - What are the current solutions/approaches and how do they fail and succeed?
    - What makes your solution unique and likely to succeed?
    - Refer to SWOT analysis and identify the key opportunities and challenges.
How are you going to ensure that implementation is successful (outcome oriented approach)?

- Thoughtful, concise, clear and comprehensive organization is key.
  - A Table of Contents at the beginning is recommended.
- Discuss the theoretical approach or model framing the population and the activity, in terms of the homeostatic, disease or aging challenges, as well as the individual social and psychological context.
- Describe how the role of the activity is portrayed and delivered to the targeted audience.
- Explain the program’s outcome-oriented approach.
- If you choose a ‘critique’, explain what [and why] you would do differently or if you developed a new program discuss any inherent limitations.
- Integrate and correctly reference scientific evidence into your discussion to strengthen and support your arguments.
- The body of the paper is the place to develop your premise logically and persuasively.
- The body should be structured into sections/paragraphs that are clearly connected and coherent. You need to demonstrate an understanding of the material and critically evaluate the evidence you use.
- The conclusion should briefly summarize the main points in order to address the purpose and/or the importance of the topic that was established in the introduction. It should be crisp and compelling (do not introduce any new material in the conclusion).

Therefore, the key to a well-written discussion is to outline the focus/purpose/premise of the essay in your introduction and logically structure your discussion accordingly. Since the progression and framework of the course supports the detail required in this essay, more discussion and examples of what is expected in it will be discussed during classes, so it is important that students attend each class.

**Common areas where marks are lost in writing:**

- Essay title does not capture the essence.
- No clear introduction that outlines your focus
- Your position is not clear or strongly supported throughout your discussion
- Points are vague or include factual errors
- Too descriptive – needs deeper level analysis/explanation/interpretation/specific examples
- Unsupported generalizations
- Doesn’t acknowledge sources of information
- Irrelevant passages – that do not show how the points being made relate to the argument
- Poor expression or writing style makes the essay hard to follow
- Over use of quotations
- Links between points are missing or unclear – that is, ideas do not flow logically
- Too colloquial or journalistic – a more academic style is required in essay writing

**Format**

- Include a Title Page with a purposeful title of the essay, and Student Name and Number
- Table of Contents and Headings/Sub-headings.
- Use double-spacing
- Use 12pt Times New Roman font
- Use default .doc margins
- Have numbered pages
- Use paragraphs (point form notes are not acceptable)
- Use current APA formatting for in-text citations and referencing

**Part C: 5 Minute Project ‘Pitch’ [5%]**

Refer to course MAP and in-class discussion.

This will consist of a brief, concise presentation designed to convey the essential elements of your program in 5 minutes or less. Presentation technologies such as PowerPoint or Prezi are to be used.