# Western University Faculty of Health Sciences School of Kinesiology

# KIN 4412A - Exercise for Specific Populations: Impairment and Aging Fall 2021

Instructor: Dr. Alis Bonsignore Lectures: M/W/F 12:30 - 1:30

Office: Not Available Fall 2021

**Instruction Mode:** In person lectures **Email**: lbonsig@uwo.ca

Phone: Not Available

Office Hrs: Every other Friday from 3pm – 5pm via zoom or in person by appointment following

scheduled classes.

TAs: Joshua Daniel Huggard Email: jhuggard@uwo.ca

**NOTE:** All course information including grades, assignment outlines, deadlines, etc. are available via OWL. Check the website regularly for course announcements.

### **Calendar Course Description (including prerequisites/anti-requisites):**

Students will learn the role of exercise in the management of chronic disease. The focus will be on understanding the roles exercise plays for individuals with impairment and older adults (i.e. diagnosis; rehabilitation; improved health). Exercise guidelines will be examined within the context of Clinical Kinesiology and clinical practice.

Antirequisite(s): The former Kinesiology 3413A/B.

Prerequisite(s): Kinesiology 3412A/B.

Extra Information: 3 lecture hours.

You are responsible for ensuring that you have successfully completed all course pre-requisites, and that you have not taken an anti-requisite course.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

NOTE: If you wish to enroll in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.

#### **My Course Description**

The key learning objectives of this course are to develop expertise in understanding how to create safe and effective exercise and chronic disease management programs for people living with chronic health conditions in the context of preventing or managing functional impairments. Students will become knowledgeable in the pathophysiology of disease, exercise testing for clinical populations,

how to prescribe safe exercise according to clinical guidelines, special considerations for exercise programing and clinical benefits of exercise training. This course will focus on people living with cancer, heart failure, history of stroke, depression and older adults. The lectures will use real-world case studies to build the clinical skills needed to succeed in the field of Clinical Kinesiology.

#### **Learning Outcomes/Schedule:**

#### **LEARNING OUTCOMES:**

- 1.**Identify and delineate** theoretical terms and concepts related to clinical exercise testing, prescription and chronic disease management programs.
- 2.**Discuss** the pathophysiology of chronic health conditions in the context of exercise prescriptions and clinical outcomes to exercise training.
- 3. **Synthesize** the current evidence-based practices for exercise testing, prescriptions and interventions for chronic health conditions.
- 4. **Develop** clinical and decision-making skills needed to succeed as a Registered Kinesiologist in clinical practice.
- 5. **Further develop** analytical skills as they relate to working with people with chronic health conditions in clinical settings.

# **CLASS SCHEDULE AND READING OUTLINE (Tentative)**

Week	Topic	Readings	
1	Introduction; Chronic Disease and Self-Management	Pg 1-19	
Sept 8th	Models	Pg 361-362	
2	Exercise for Impairment and Aging	Readings will be posted on	
Sept 13th		OWL and discussed in class	
3	Exercise and Cancer	Pg 313-324	
Sept 20th			
4	Exercise and Cancer	Readings will be posted on	
Sept 27th	Friday Lecture – Case Studies Review	OWL and discussed in class	
	Filiday Lecture		
	Quiz #1 Due Monday October 4th at 11:59pm		
5	Exercise and Heart Failure	Pg 237-242	
Oct 4th			
6	Exercise and Heart Failure	Readings will be posted on	
Oct 11th	Friday Lastura Casa Studies Daview	OWL and discussed in class	
	Friday Lecture – Case Studies Review		
	Quiz #2 Due Monday October 18th at 11:59pm		
7	Review + Mid Term Exam	None	
Oct 18th			
8	Exercise and Stroke	Pg 248-251	

Oct 25th		
9	READING WEEK – NO CLASSES	
Nov 1st		
10	Exercise and Stroke	Readings will be posted on
Nov 8th	Friday Lecture – Case Studies Review	OWL and discussed in class
	Quiz # 3 Due Monday November 15th at 11:59pm	
11	Exercise and Depression in Clinical Populations	Readings will be posted on
Nov 15th		OWL and discussed in class
12	Exercise and Older Adults	Pg 177-186
Nov 22nd	Final Case-Study Assignment Due Sunday November 28 <sup>th</sup> at 11:59pm	
13	Exercise for Complex Cases - TBD	Readings will be posted on
Nov 29 <sup>th</sup>		OWL and discussed in class
14	Final Review	None
Dec6 <sup>th</sup>		

<sup>\*\*</sup> NOTE: Real world case studies will be presented at the end of each block for each chronic health condition covered including cancer, heart failure and stroke. These case-studies will be reviewed during the second Friday lecture of each block and will also be posted on OWL for your review. The case studies posted online will provide you with an option review answers covered in class related to the case-study and will provide you will feedback on the correct answers. Although these case studies are not assigned any marks, they will be helpful for completing your case-study assignment as well as your exams. All students are encouraged to review these on an ongoing basis.

# **Required Course Material:**

Required readings provided are from the ACSM Guidelines for Exercise Testing and Prescription (11<sup>th</sup> Edition). Supplemental articles will be posted on OWL throughout the semester.

# **Evaluation Components:**

Component I	Value: 25%	Date: Friday October 29 <sup>th</sup> 12:30 pm in class
Mid-term Test:	The mid-term test is 50 minutes in duration and is based upon all material covered since the start of term up to the lecture prior to the test. The test will comprise of two parts: multiple choice or true/false questions and short-answer questions. Calculators are permitted.	
Component II	Value: 25%	Date: Due Sunday November 28th, submitted in class or online
Case-Study Assignment	As a Clinical Kinesiologist, some of your main responsibilities are to be able to properly screen clients for exercise, understand your client's medical conditions and	

	effective exercise, and describ your client in a way that is eas the purposes of this assignmentates study on one of the health comprepare a final report using a proposider preparing this report care professionals with experting management and exercise.	how it affects your exercise program, prescribe safe and effective exercise, and describe the benefits of exercise to your client in a way that is easy for them to understand. For the purposes of this assignment, you will complete a case study on one of the health conditions discussed in class and prepare a final report using a pre-defined template. Consider preparing this report to be given to other health care professionals with expertise in chronic disease management and exercise. Please consider completing the example case-studies posted on OWL to prepare for this assignment.	
Component III	Value: 15% (5% per quiz)	Date: Mondays throughout the semester – weeks are listed in schedule above	
Online Quizzes (x3)	health conditions including car multiple choice and fill in the b OWL. Students can expect the 10-15 questions long. Each stu quizzes independently. These and completed in a set amoun	At the end of each block of lectures on common chronic health conditions including cancer, heart failure and stroke a multiple choice and fill in the blank quiz will be posted on OWL. Students can expect the quizzes to be approximately 10-15 questions long. Each student shall complete the quizzes independently. These quizzes will be open book and completed in a set amount of time. Students will not be able to go back once a question is completed.	
Component IV	Value: 35%	Date: TBD, Final Exam Period	
Final Exam:	will have multiple choice true/fa answer questions plus one inte are permitted. Given the nature	Scheduled during the examination period, the 2-hour exam will have multiple choice true/false questions and short-answer questions plus one integrative problem. Calculators are permitted. Given the nature of the course, material is cumulative but a larger focus will be on material covered since the mid-term test.	

### **Course Evaluation and Missed Quizzes/Tests/Assignments:**

Assignments (i.e., case study assignment) are due as stated in the course syllabus and will not be accepted late, except under medical or other compassionate circumstances. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. A missed midterm examination, without appropriate documentation will result in a zero (0) grade. Acceptable reasons include hospital stays, serious illness, family emergencies (like serious accidents, illness or death) or similar circumstances. In the case that you miss a mid-term with appropriate documentation, the % of your grade allocated to the mid-term will be added to your final exam for a total of 60% of your final grade. In the case that you miss the deadline for an online quiz, your mark will be divided over the number of quizzes you complete. For example, if you complete 2 of 3 quizzes, the two completed quizzes will be worth 7.5% of your final grade rather than 5% for each of the three quizzes for a total of 15% of your final grade.

# **Course/University Policies**

#### 1. Statement on Use of Personal Response Systems ("Clickers")

If Personal Response Systems ("Clickers") are used in the course, a reference to the Guidelines for their use (Guidelines are shown below). Instructors are to communicate clearly to students information on how clickers are used including: how the student's privacy will be protected, how

clickers may be used by the instructor for data gathering and for evaluating the students, and why they cannot be used by anyone but the student (since the students involved in misuse of a clicker may be charged with a scholastic offence).

- 2. **Academic offences**: They are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf
- A) Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com <a href="https://www.turnitin.com">http://www.turnitin.com</a>
- B) Computer marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

# 3. Electronic Device Usage:

**During Exams -** Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any of the following electronic devices during ANY of the tests, quizzes, midterms, examinations, or other in-class evaluations: cellphones, smart phones, smart watches, smart glasses, audio players or recorders of any sort, video cameras, video games, DVD players, televisions, laptop/notebook/netbook computers, flashlights or laser pointers.

**During Lectures and Tutorials:** Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. Please be respectful to your fellow students and turn the sound off. If the professor receives complaints from other students regarding noise or other disruptive behavior (e.g. watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom privileges will be revoked. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. **Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.** 

#### 4. Health and Wellness:

Information regarding health and wellness-related services available to students may be found at <a href="http://www.health.uwo.ca/">http://www.health.uwo.ca/</a>.

Students who are in emotional/mental distress should refer to Mental Health@Western (<a href="http://www.health.uwo.ca/">http://www.health.uwo.ca/</a>) for a complete list of options about how to obtain help.

# 5. Support Services

There are various support services around campus and these include, but are not limited to:

- 1. Student Development Centre -- <a href="http://www.sdc.uwo.ca/ssd/">http://www.sdc.uwo.ca/ssd/</a>
- 2. Student Health & Wellness -- http://www.health.uwo.ca/
- 3. Registrar's Office -- http://www.registrar.uwo.ca/

4. Ombudsperson Office -- http://www.uwo.ca/ombuds/

# 6. Accommodation, Illness Reporting and Academic Considerations:

http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID= 1&SelectedCalendar=Live&ArchiveID=#Page 12

#### **Accommodation Policies**

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: <u>Academic Accommodation for Students with Disabilities</u>.

#### **Academic Consideration for Student Absence**

https://www.uwo.ca/fhs/kin/undergrad/academic/consideration/index.html

Students will have up to two (2) opportunities during the regular academic year to use an on-line portal to self-report an absence during the term, provided the following conditions are met: the absence is no more than 48 hours in duration, and the assessment for which consideration is being sought is worth 30% or less of the student's final grade. Students are expected to contact their instructors within 24 hours of the end of the period of the self-reported absence, unless noted on the syllabus. Students are not able to use the self-reporting option in the following circumstances:

- for exams scheduled by the Office of the Registrar (e.g., December and April exams)
- absence of a duration greater than 48 hours,
- assessments worth more than 30% of the student's final grade,
- if a student has already used the self-reporting portal twice during the academic year

If the conditions for a Self-Reported Absence are *not* met, students will need to provide a Student Medical Certificate if the absence is medical, or provide appropriate documentation if there are compassionate grounds for the absence in question. Students are encouraged to contact their Faculty academic counselling office to obtain more information about the relevant documentation.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For Western University policy on Consideration for Student Absence, see Policy on Academic Consideration for Student Absences - Undergraduate Students in First Entry Programs

and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic\_policies/appeals/medicalform.pdf.

#### **Religious Accommodation**

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the <a href="Western Multicultural Calendar">Western Multicultural Calendar</a>.

7. **Examination Conflicts**: A student with examinations having flexible submission times (e.g., where one or more examination is a take-home examination) cannot request alternative

arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time within the window specified by the instructor. This applies to direct conflicts as well as "heavy load" conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request accommodation with their academic counselling unit prior to the deadline to drop a course without academic penalty

In the case of online examinations, an "Examination Conflict Room," which may be assigned when a student is scheduled to write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.

8. **Grades**: Where possible assignment objectives and rubrics will be posted on OWL. Should you have a concern regarding the grade you received for an assignment or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor or TA. In doing so, please make an appointment and prepare in writing, with evidence, why you feel your grade is inappropriate. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same. Note that calculations errors (which do occur!) should be brought to my attention immediately.

Generally, students can expect some form of feedback on their performance in a course before the drop date.

- □ November 12th, 2021 (for first term half-courses)
- □ November 30th, 2021 (for full-year courses)
- □ March 7th, 2022 (for second term half-or full year courses)

A+	90-100	One could scarcely expect better from a student at this level
Α	80-89	Superior work that is clearly above average
В	70-79	Good work, meeting all requirements and eminently satisfactory
С	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable.
F	below 50	Fail

#### **Rounding of Grades** (for example, bumping a 79 to 80%):

This is a practice some students request. **This practice will not occur here.** The edges of this course are clear and sharp. The mark attained is the mark you achieved and the mark assigned; there is no rounding to the next grade level, or 'giving away' of marks. <u>Please don't ask me to do this for you; the response will be "please review the course outline where this is presented".</u>

- 9. Contingency Plan for an In-Person Class Pivoting to 100% Online Learning: In the event of a COVID-19 resurgence during the course that necessitates the course delivery moving away from face-to-face interaction, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will **not** change. Any remaining assessments will also be conducted online as determined by the course instructor
- 10. **Online Etiquette**: Some components of this course will involve online interactions. To ensure the best experience for both you and your classmates, please honour the following rules of etiquette:
  - please "arrive" to class on time
  - please use your computer and/or laptop if possible (as opposed to a cell phone or tablet)
  - ensure that you are in a private location to protect the confidentiality of discussions in the event that a class discussion deals with sensitive or personal material
  - to minimize background noise, kindly mute your microphone for the entire class until you are invited to speak, unless directed otherwise
  - [suggested for classes larger than 30 students] In order to give us optimum bandwidth and web quality, please turn off your video camera for the entire class unless you are invited to speak

- [suggested for cases where video is used] please be prepared to turn your video camera off at the instructor's request if the internet connection becomes unstable
- unless invited by your instructor, do not share your screen in the meeting

The course instructor will act as moderator for the class and will deal with any questions from participants. To participate please consider the following:

- if you wish to speak, use the "raise hand" function and wait for the instructor to acknowledge you before beginning your comment or question
- remember to unmute your microphone and turn on your video camera before speaking
- self-identify when speaking.
- remember to mute your mic and turn off your video camera after speaking (unless directed otherwise)

# General considerations of "netiquette":

- Keep in mind the different cultural and linguistic backgrounds of the students in the course.
- Be courteous toward the instructor, your colleagues, and authors whose work you are discussing.
- Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. "Flaming" is never appropriate.
- Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

#### 11. Student Code of Conduct

The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit <a href="https://www.uwo.ca/univsec/pdf/board/code.pdf">https://www.uwo.ca/univsec/pdf/board/code.pdf</a>