

Kinesiology and Health Sciences

COURSE OUTLINE – Fall 2022

PF2990 (A2): Corrective Exercise Strategies– 3 (3-0-1) 60 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR: James Phillips

OFFICE: K216

OFFICE HOURS: Upon request

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CALENDAR DESCRIPTION: This course examines human movement to identify movement dysfunction and increased risk potential. Emphasis will be on identifying sources of impairment through muscle and movement assessment techniques. Students will learn to apply corrective exercises to recovery from impairments, reduce injury potential, and improve performance..

PREREQUISITE(S)/COREQUISITE: Pre-requisites: PE1000, PE1210

REQUIRED TEXT/RESOURCE MATERIALS: Reading materials or links will be made available on myclass as necessary.

DELIVERY MODE(S): This course will be delivered via in-person person classes and labs. Participation by zoom may be accommodated at the discretion of the instructor.

COURSE OBJECTIVES:

Upon successful completion of this course, students will be able to:

1. Describe and determine the relationships between the skeletal, nervous, and muscular systems.
2. Develop analytical skills regarding human movement.

3. Identify functional movement patterns and postural assessments in clients to reduce the risk of injury.
4. Acquire the necessary skills to modify corrective exercise interventions safely and effectively for the foot, ankle, hip, low back, shoulder, and spine.

LEARNING OUTCOMES:

Through completion of this module, students will have the opportunity to:

1. Describe the inter-dependent and intra-dependent relationship of the skeletal, nervous, and muscular system.
2. Perform, interpret, and analyze static and transitional postural assessments.
3. Develop, implement, and modify corrective exercise interventions for the foot, ankle, hip, low back, shoulder, and spine.
4. Describe the rationale for the corrective exercise model and the individual components.

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

**** 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**

EVALUATIONS:

Lab Assignments	Varies	20%
Social Media Post	Varies	5%
Midterm Exam	Oct 20	15%
Corrective Exercise Program	Dec 6	30%
Final Exam	TBD	30%
	Total	100%

GRADING CRITERIA: (The following criteria may be changed to suite the particular course/instructor)

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines

A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

	Monday Lab	Tuesday Lecture	Readings	Thursday Lecture	Readings
Sept 1				Introduction	
Week 2	Labour Day –	Nervous and Muscle Systems		What is pain?	Page et al. (2010)
Week 3		Foot: Anatomy, Review, Common Errors	Martini et al. (2013)	Foot: Corrective Exercises	
Week 4	Foot Corrective Exercises	Ankle: Anatomy Review, Common Errors	Martini et al. (2018)	Ankle: Corrective Exercises	
Week 5	Ankle Corrective Exercises	Hip: Anatomy, Review, Common Errors	Martini et al. (2018)	Hip: Corrective Exercises	
Week 6	Hip Corrective Exercises	Low Back: Anatomy Review, Common Errors	Martini et al. (2018)	Low Back: Corrective Exercises	
Week 7	Fall Break – No Classes				
Week 8	Low Back Corrective Exercises	Midterm		Shoulder: Anatomy Review, Common Errors	Martini et al. (2018)
Week 9	Shoulder Corrective Exercises	Shoulder: Corrective Exercises		Spine: Anatomy Review, Common Errors	Martini et al. (2018) Berdishevsky et al. (2016)
Week 10	Spine Corrective Exercises	Social Media as a Tool Learning Commons		Posture Analysis	Houglum (2016) Kritz & Cronin (2008)
Week 11	Static Posture Analysis	Squat Analysis	Starrett & Cordoza (2015) Myer et al. (2014)	Deadlift Analysis	Starrett & Cordoza (2015) Hales (2010)
Week 12	Squat Analysis	Standing Row Analysis		Push Up Analysis	Van den Tillaar (2019)
Week 13	Deadlift/Row Analysis	Chest Press Analysis	Starrett & Cordoza (2015)	Corrective Exercise Programs	Price (2019) Houglum (2016)
Week 14	Push Up/Chest Press Analysis	Corrective Exercise Programs	Price (2019) Houglum (2016)	Range of Motion Techniques	Price (2019) Guillot et al. (2019)

Week 15	Range of Motion Techniques	Review
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STUDENT RESPONSIBILITIES:

- All assignments are expected to be submitted on the due date. Late assignments will be deducted 10% per day up to 4 days late. After 4 days late, assignments will not be accepted. If you have a significant issue or concern (e.g., illness or family emergency), contact the instructor as soon as possible.
- Regular attendance is a key to success in this and every other course. Please contact the instructor if you have to miss class. It is the student's responsibility to acquire any materials and content missed due to absence.
- If you are participating via zoom your camera must be on and you must be in an appropriate learning environment.
- Missed labs cannot be made up unless there is a significant issue and the instructor has given permission to make up the lab.
- Lectures/Slides will be provided to students in a format of the instructors choosing. You may not always receive complete slides or there may be alterations to the ones posted. It is the student's job to ensure they are taking appropriate notes.

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>

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