

Kinesiology and Health Sciences

COURSE OUTLINE – Fall 2022

PE2030 (A2): Skill Acquisition and Performance – 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

PHONE: 780-539-2053

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CALENDAR DESCRIPTION: The course presents a psychological approach to understanding human motor behaviour. You will examine the processes involved in learning motor skills and controlling movement and the factors that influence acquisition and performance.

PREREQUISITE(S)/COREQUISITE: None

REQUIRED TEXT/RESOURCE MATERIALS: Schmidt, R. A., & Lee, T. D. (2019). *Motor learning and performance: From principles to application* (6th ed.). Champaign, IL: Human Kinetics.

Additional Resources as designated by the instructor

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:

1. To discuss the theoretical approaches that drive motor control and learning research.
2. To describe and explain the principles and processes underlying skilled performance.
3. To explore the ways in which the human motor system supports the acquisition and retention of complex movement skills.
4. To explore how instructional situations can be varied in order to better achieve maximum

performance and retention of taught skills.

5. To provide an opportunity to apply theory to field situations.

LEARNING OUTCOMES:

1. Define the concepts of motor learning and performance and describe the stages associated with motor skill acquisition.
2. Construct an information processing model used for motor skill acquisition.
3. Know how attentional processes and anxiety can influence motor skill acquisition.
4. Classify motor skills and understand the possible effects of previous motor skill learning on the acquisition of new skills.
5. Understand how memory impacts learning and apply this knowledge to instructional techniques.
6. Compare the differences in processing abilities between expert and novice performers.
7. Appreciate the different types of feedback techniques and understand which is best to learn motor skills.
8. Create and construct effective learning environments through various practice techniques and practice organization.

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:

Midterm #1	15%	Wednesday, September 28 th
Midterm #2	15%	Wednesday, November 16 th
Lab Assignments	20%	Due throughout semester
Final Project	20%	Due by Wednesday, December 7 th
Final Exam	30%	TBA

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:

Lectures: 4:00-5:20pm Monday/Wednesdays

Labs: 2:30-3:20 Fridays

*This is a tentative schedule and may change based on progress as a class. Change will be communicated both in class and through myclass.

Date	Topic	Readings
Week 1:	Lec1: N/A Lec2: Course outline and introduction Lab: <u>No lab</u>	
Week 2:	Lec1: <u>Labour Day – No Classes</u> Lec2: Introduction to motor learning Lab 1: Using skill classification systems	Chapter 1
Week 3:	Lec1 & 2: Processing information and making decisions Lab 2: Processing information and making decisions	Chapter 2
Week 4:	Lec1 & 2: Attention and performance and mid-term #1 review Lab 3: Attention and performance	Chapter 3
Week 5:	Lec1: Sensory contributions to skilled performance Lec2: Mid-term #2 Lab 4: National Truth & reconciliation – No Labs	Chapter 4
Week 6:	Lec1: Sensory contributions to skilled performance Lec2: Motor programs Lab 5: Motor programs/Closed-loop control	Chapter 4 and chapter 5
Week 7:	Fall Break – No Classes	
Week 8:	Lec1: Motor programs Lec2: Principles of speed accuracy and timing Lab 6: Speed accuracy trade-off	
Week 9:	Lec1: Principles of speed accuracy and timing Lec2: Performance of complex movements	Chapter 5 and Chapter 6

	<u>Lab 7: No Labs</u>	
Week 10:	Lec1: Performance of complex movements and mid-term review Lec2: Introduction to motor learning Lab: Abilities and skills	Chapter 6 and chapter 7
Week 11:	Lec1: Introduction to motor learning Lec2: Topic to be decided in class Lab 8: <u>Remembrance Day – No Class</u>	Chapter 7
Week 12:	Lec1: The motor learning process Lec2: Mid-term #2 Lab 9: Measuring retention and transfer	Chapter 8
Week 13:	Lec1: Organizing and scheduling practice Lec2: Organizing and scheduling practice Lab: Blocked and random practice	Chapter 9
Week 14:	Lec1: Augmented feedback Lec2: Augmented feedback Lab 10: Feedback	Chapter 10
Week 15:	Lec1: Review and exam preparation Lec2: No lec Lab: N/A	Chapter 11

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.