

# DEPARTMENT OF PHYSICAL EDUCATION AND KINESIOLOGY

## **COURSE OUTLINE - FALL 2018**

PE2030 (A2): Skill Acquisition and Performance – 3 (3-0-1) 60 Hours

**INSTRUCTOR:** Chantelle LaMotte **PHONE:** 780-539-2972

**OFFICE:** K221 **E-MAIL:** clamotte@gprc.ab.ca

**OFFICE HOURS:** Wednesday 9:30am-10:30am or by appointment

**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. (2014). *Motor learning and performance: From principles to application* (5th ed.). Champaign, IL: Human Kinetics.

Leonard, G. (1991). Mastery: The keys to success and long-term fulfillment. New York, NY: Plume.

Additional Resources as designated by the instructor

**DELIVERY MODE(S):** This course work will be delivered in a blended format using a variety of teaching methods including lecture, case studies, in-class worksheets & quizzes, exams, and final assignment.

#### **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:

UA, UC, UL, AU, GMU, CU, CUC, KUC.

Please consult the Alberta Transfer Guide for more information (http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2)

\*\* 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%	Thursday September 27
Midterm #2	15%	Thursday October 25
Lab Assignments	15%	Due throughout semester
In Class Quizzes & Assignments	5%	Due throughout semester
Final Project	20%	Due Thursday December 6
Final Exam	30%	During Finals: December 10-19

### **GRADING CRITERIA:**

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. This means **DO NOT GET LESS THAN "C-" IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.** 

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	С	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
В	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

# COURSE SCHEDULE/TENTATIVE TIMELINE:

Lecture – Tuesdays/Thursdays: 10:00am-11:20am (J203)

Lab – Tuesdays: 2:30-3:20am (J203 & Gym)

Note: This is a tentative schedule and may change based on our progress as a class. Any changes will

be communicated in class and on Moodle.

Date	Topic	Readings	
Week 1	Lecture: Course outline and introduction		
Sept 6	No lab this week		
Week 2	Lecture: Introduction to motor learning and performance;	Chapters 1-2	
Sept 11/13	Processing information and making decisions		
_	Lab 1 (J203): Juggling		
Week 3	Lecture: Processing information and making decisions	Chapter 2	
Sept 18/20	Lab 2 (J203): Processing information and making decisions		
Week 4	Lecture: Attention and performance & Midterm review	Chapter 3	
Sept 25/27	Midterm 1: September 27		
-	Lab 3 (Gym): Attention and performance		
Week 5	Lecture: Sensory contributions to skilled performance	Chapter 4	
Oct. 2/5	Lab 4 (J203): Closed loop control		
Week 6	Lecture: Motor programs	Chapter 5	
Oct 9/11	Lab 5 (J203): Modes of control		
Week 7	Lecture: Principles of speed, accuracy, and coordination/	Chapter 6	
Oct 16/18	Midterm review		
	Lab 6 (J203): Speed-accuracy trade-off		
Week 8	Lecture: Individual differences	Chapter 7	
Oct 23/25			
	No lab this week		
Week 9	Lecture: Individual differences &	Chapter 7	
Oct 31/ Nov 1	Lab 7 (Gym): Abilities and skills		
Week 10	Lecture: Introduction to motor learning	Chapter 8	
Nov. 6	No class Nov 8 (PEAK Student for a Day)		
	Lab 8 (Gym): Measuring retention and transfer		
Week 11	Lecture: Mastery	Mastery	
Nov. 15	No class Nov.13 & no lab this week (Fall Break)		
Week 12	Lecture: Skill acquisition, retention, and transfer	Chapter 9	
Nov. 20/22	Lab 9 (J203): Stages of learning		
Week 13	Lecture: Organizing and scheduling practice	Chapter 9-10	
Nov 27/29	Lab 10 (J203): Blocked and random practice		
Week 14	Lecture: Augmented feedback	Chapter 10-11	
Dec. 4/6	Lab 11 (J203): Self-requested feedback		
Week 15	Lecture: Final exam review	Chapter 11	
Dec. 6	Final project due: December 6		
	No lab this week		

## 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.
- Missed labs cannot be made up unless there is a significant issue and the instructor has given permission to make up the lab.
- Labs require student participation and activity. Wear clothing that is comfortable for the activity for the day so you can fully participate in the lab.

## 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 College Admission Guide at <a href="http://www.gprc.ab.ca/programs/calendar/">http://www.gprc.ab.ca/programs/calendar/</a> or the College Policy on Student Misconduct: Plagiarism and Cheating at <a href="http://www.gprc.ab.ca/about/administration/policies/\*\*">www.gprc.ab.ca/about/administration/policies/\*\*</a>

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

#### ADDITIONAL INFORMATION:

# **Lab Assignments:**

Each lab will include something to be handed in. Some labs will be handed in immediately at the end of the lab and others will be due the following week. Be sure to pay attention to what is to be handed in.

# In Class Quizzes & Assignments:

There will be quizzes and short assignments in class throughout the semester. Students must be in class to get points for quizzes and assignments. No make-up quizzes or assignments will be permitted.

#### **Exams:**

Each midterm will cover 3-4 chapters and related content from those lectures and labs. The final exam will cover all material (lectures and labs) but with a heavier emphasis on the content from after midterm #2.

## **Final Project:**

Students will design a learning experience using the principles presented in the class to assist someone who is trying to learn or relearn a motor skill in a hypothetical situation.