

## **KIN 345: Motor Control, Development, and Learning Spring 2009**

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### **COURSE DESCRIPTION**

The principles of motor control and skill acquisition across the lifespan.

### **PREREQUISITES**

Prerequisites: PGS 100 or 101 – Introduction to Psychology, C or better  
BIO 201 or ZOL 201 – Human Anatomy and Physiology, C or better

### **REQUIRED TEXTS**

1. Control and Learning Textbook  
Schmidt, R. A. & Wrisberg (2008). Motor Learning and Performance: A Situation-based Learning Approach (4th Edition). Human Kinetics Publishers Ltd.
2. Developmental Textbook  
Payne, V. G., & Isaacs, L. D. (2008). Human Motor Development: A Lifespan Approach (7th Edition). Mayfield Publishing Company.

### **WEBSITE**

All students will be required to use the online course website to access instructor correspondence, grades, lecture notes, and/or handouts. If you need help with web access or computer use or have any unique needs, please contact the instructor.

### **SCHEDULES**

The schedules and reading assignments contained in this syllabus may be subject to change. You are responsible for all announcements concerning changes in the course outline, readings, assignments, exams, and other matters made during class periods whether or not you are in attendance when announcements are made. Reading assignments for each class are listed below. Students are expected to read this material before attending class.

Lectures will always be on Mondays and Wednesdays. Assignments, guest speakers, and/or readings will be on Fridays. There are always activities on Fridays that will be reflected in the grades through the assignment grades or exams. However attendance in class will only be on selected Fridays.

### **ATTENDANCE**

Regular attendance is essential. Missed assignments CANNOT be made up, except in the case of university business or religious holiday. No late assignments will be accepted.

### **ACCOMODATIONS FOR DISABILITIES**

We will make any reasonable accommodations for limitations due to any disability including learning disabilities. Please arrange an appointment to see us to discuss any needs you might have. You might also want to make an appointment with Disability Resources at 965-1234 to find out what campus assistance may be available to you.

## GROUP WORK

You are encouraged to work in small groups to discuss assignments and Quiz questions. However, quiz answers must be submitted individually. Communication or other forms of cheating during exams will result in a failing grade for the course and possible referral to the university for disciplinary action.

## EXAMS

Exams will evaluate comprehension of the important concepts presented in the course, and the ability to apply these concepts to novel problems. Exams will consist of multiple-choice questions. The assignments and exam dates are scheduled ahead of time for your convenience, therefore plan accordingly. No missed exam or assignment will be excused unless you show the instructor a VALID AND WRITTEN EXCUSE FROM A REPUTABLE SOURCE. If no valid excuse is provided, the student will get 0 for the missed points.

## GRADING

Grades will be assigned according to points earned during the course. This course is not curved. The cut-offs are the cut-offs, so make sure that you are not just below one.

<b>GRADING</b>	<b>Points</b>	<b>Percent of final grade</b>
Assignments/Quizzes	140	28%
Exam 1	100	20%
Exam 2	100	20%
Final (cumulative)	160	32%
<b>Total</b>	<b>500</b>	<b>100%</b>

<b>POINTS</b>	<b>PERCENTAGE</b>	<b>LETTER GRADE</b>
500-490	100 %-98.0%	A+
489-465	97.9%-93.0%	A
464-450	92.9%-90.0%	A-
449-440	89.9%-88.0%	B+
439-415	87.9%-83.0%	B
414-400	82.9%-80.0%	B-
399-350	79.9%-70.0%	C
349-300	69.9%-60.0%	D
299-000	59.9%-0.00%	E
<b>* Note that missing one assignment can result in a drop of almost a letter grade</b>		

## CLASSROOM HONESTY AND INTEGRITY

Honesty and integrity are a reflection of your character. Because students compete with one another for grades and eventually career opportunities, cheating is considered a serious offense. Please refer to the department handout discussing honesty and integrity. Cheating an/or plagiarism is a serious offense with a minimum punishment of a failing grade on the assignment and a maximum punishment of expulsion from the University.

## CLASS SCHEDULE

\*Subject to change at any time\*

Classes are Monday, Wednesday, and Friday, 10:45-11:35 PM, EDC Lecture Hall 117

<i>Date</i>	<i>Topic</i>	<i>Reading</i>
21 January	Course Introduction	Syllabus
23 January	Science Obtaining online articles and Reading the Scientific Literature	Handouts P&I pp. 18-20
26 January	Motor Control Open Loop control	S&W pp. 105-112
28 January	Passive Dynamic Stability	
30 January	Muscles and Neurons Neurophysiological techniques <b>Assignment 1 Due</b>	
2 February	Motor Control Closed Loop control	S&W Ch 3 pp. 64-100
4 February	Motor Control Reflex systems	
6 February	Reflex systems, cont.. <b>Assignment 2 Due</b>	
9 February	Motor Control Closed Loop vs. Open Loop control. Feedback Delays.	
11 February	Intrinsic muscle physiological contributions to motor control	
13 February	<b>Assignment 3 Due</b> Movie: The Man Who Lost His Body	
16 February	Neuroanatomy of Motor Control: Brain	
18 February	Neuroanatomy of Motor Control: Spinal Cord	
20 February	Information Processing Hick's Law Fitt's Law <b>Assignment 4 Due</b>	S&W pp. 26-30 pp. 141-157
23 February	Exam I Q&A	
25 February	<b>EXAM 1</b>	
27 February	Exam 1 Review	
2 March	Motor Programs	S&W pp. 112-129
4 March	Introduction to Motor Development	S&W pp. 3-21 (Chapter 1) P&I pp. 1-20 (Chapter 1)
6 March	NO CLASS	
9 March	SPRING BREAK -- NO CLASS	
11 March	SPRING BREAK -- NO CLASS	

13 March	SPRING BREAK -- NO CLASS	
16 March	Reflexes during development	P&I pp. 235-254
18 March	Gross Motor Development	P&I pp. 258-267 pp. 299-316
20 March	Gross Motor, Cont...	
23 March	Assignment 5 Due Fine Motor Development	P&I pp. 267-296 pp. 328-348
25 March	Effects of Early Stimulation and Deprivation	P&I pp. 107-129
27 March	Movie: Secrets of a Wild Child	
30 March	Assignment 6 Due Perceptual-Motor Development	P&I 213-232
1 April	GUEST LECTURE: Dr. Dounskaia	
3 April	Motor control and aging	P&I pp. 189-192 pp. 294-295 pp. 392-419
6 April	Assignment 7 Due Exam 2 Q&A	
8 April	EXAM 2	
10 April	Exam 2 Review	
13 April	Individual Differences	S&W pp. 162-183
15 April	Assessing Motor Function	S&W pp. 203-215 P&I Chapter 16
17 April	Attention and Memory	S&W pp. 39-57 222-224
20 April	Assignment 8 Due Learning Mechanisms	
22 April	Types of Practice	S&W pp. 9-10 pp. 190-203 pp. 228-250
24 April	Structuring the learning experience	S&W pp. 225-228 pp. 256-278
27 April	Assignment 9 Due Providing feedback during learning	S&W pp. 284-316
29 April	Facilitating learning and applying the principles	S&W Chapters 11 and 12
1 May	Facilitating, cont...	
4 May	Assignment 10 Due Final exam Q&A	
11 May 9:50 - 11:40 AM	FINAL EXAM (cumulative)	