FOUNDATIONS AND ANALYSIS OF HUMAN MOVEMENT Department of Kinesiology CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

Fall 2011	KIN 300 16348 K Dino Vrongistinos	W 04:00-6:50	Location: RE155
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Instructor: Konstantinos "Dino" Vrongistinos, Ph.D.	e-mail: kv61497@csun.edu
Office: RE281	Phone: (818)-677-7567
Office Hours: M, T 5:00-6:30, W 1:30-2:30 (Not During EPC), & by appointment	http://www.csun.edu/~kv61497

Required Text: Whiting, W.C., and S. Rugg (2005). Dynatomy: Dynamic Human Anatomy. Champaign, IL: Human Kinetics, 2005.

Course Prerequisites: Biology 211/212 or KIN 275,

<u>Course Description</u>: Examination of anatomical and neuromechanical concepts relevant to human movement analysis and muscular control of movement. Application of functional anatomy to fundamental movements and select movement forms in exercise, sport, and dance, emphasizing movement analysis across the life span and across a full range of abilities.

The Department of Kinesiology has four Student Learning Outcomes (SLO):

- 1. Apply an integrated kinesiological approach to encourage the adoption of healthy and physically active lifestyles, across diverse populations.
- 2. Apply evidence based practices to enhance the study of human movement.
- 3. Demonstrate competent problem solving strategies through intentional practices.
- 4. Demonstrate knowledge of kinesthetic forms, processes and structures as they apply to the personal expression and culture of human movement.

SLOs are aligned with the following Course Objectives as indicated in brackets [SLO #].

Course Objectives:

- (1) Explain the importance of movement in our daily lives. [SLO #1, 2, 4].
- (2) Appreciate the multidisciplinary perspective necessary to understand human movement. [SLO #1].
- (3) Describe the structure and function of the human neuromusculoskeletal systems. [SLO #2].
- (4) Explain joint motion and function of the skeletoarticular system. [SLO #2].
- (5) Describe the types of muscle contraction and factors affecting muscle force production. [SLO #2].
- (6) Determine the functional actions of muscles. [SLO #2].
- (7) Identify the muscles acting at the major joints of the body. [SLO #2].
- (8) Explain the biomechanical principles involved in human movement. [SLO #2].
- (9) Use the muscle control formula to determine muscle action for any movement. [SLO #2, 3].
- (10) Explain the concepts of coordination, efficiency and economy. [SLO #2].
- (11) Describe methods of kinematic, kinetic, and electromyographic assessment. [SLO # 2, 3].
- (12) Explain the fundamentals of posture, balance, and walking. [SLO #2].
- (13) Explain the fundamentals of running, jumping, throwing, kicking, and lifting. [SLO #2].
- (14) Determine the neuromuscular control of select movement forms in exercise, sport, and dance. [SLO #2, 4].
- (15) Explain how movement changes across the life span. [SLO # 1, 2, 4].
- (16) Explain how movement changes across a broad range of abilities. [SLO #1, 2].

<u>Evaluation:</u> Course grades will be based on the following point distribution.

300 (3 units)	81	
Exam #1	(5 th Week)	200 pts (20%)
Presentations/Assignments	Instructor Due Day	100pts (10%)
Exam #2	(10 th Week)	200 pts (20%)
Exam #3	(14 th Week)	200 pts (20%)
Final Exam	(Final's Week)	300 pts (30%)
Course Total		1000pts (100%)

Schedule is tentative and subject to changes

Assignment of grades will be based on the following ranges:

A = 900-1000 pts;	B = 800-899 pts;	C = 700-799 pts;	D = 600-699 pts;	F = less than 600 pts.

Assignment of plus/minus grade adjustments to the above scale will be determined by the final class point distribution.

Examination Policies & Miscellaneous Information

- 1. Students will **not** be allowed to leave the room during exams. Please attend to any personal needs before the exam.
- 2. Make-up exams will be considered only under exceptional circumstances.

(Note: "I overslept", "I'm tired", "I'm not prepared", etc. are **not** exceptional circumstances!)

Any student who fails to contact the instructor prior to any missed exam may **not** be allowed to makeup the exam.

- 3. Absence for medical reasons requires written verification by a physician.
- 4. Exams will **not** be rescheduled based on a student's personal work/school schedule. Please plan ahead.
- 5. Questions/concerns regarding grading for any exam must be resolved with the instructor within **one week** of the date graded-exams are returned to the student.
- 6. All exams are non-circulating.
- A. Time Elements Class begins promptly on the scheduled hour
- B. *Behavior* Treat other students and the instructor with respect and civility. Free discussion, inquiry, and expression is encouraged in this class. Classroom behavior that interferes with either (a) the instructor's ability to conduct the class or (b) the ability of students to benefit from the instruction is not acceptable. Examples may include routinely entering class late or departing early; use of beepers, cellular phones, or other electronic devices; repeatedly talking in class without being recognized; talking while others are speaking; or arguing in a way that is perceived as "crossing the civility line." Eating food or chewing ice during lecture or discussion time is unacceptable. Turn-off cellular phones and other communications electronics
- C. Cheating & Plagiarism will not be tolerated. Severe penalties will be imposed including an F on the exam, and potentially and F in the course, and may also be subject to more severe discipline by the University. Please review the Student Conduct on Academic Dishonesty in the current Schedule of Classes and in the University Catalog.

Each student is expected to be familiar with, and abide by, the conditions of student conduct, as presented in the CSUN Catalog (Appendix C), with emphasis on sections: Student Conduct Code, Academic Dishonesty, Faculty Policy on Academic Dishonesty, and Penalties. Any student engaging in academic dishonesty (e.g., cheating, fabrication, facilitating academic dishonesty, plagiarism) is subject to discipline, which may include a failing grade in the course, and may also be subject to more severe discipline by the University.

- D. Assignments turned in one day late will receive 50% credit. After one day, no credit will be given.
- E. Requests for an Incomplete (I) must confirm to university policies. Among other requirements, "I" is possible only for instances in which a student is demonstrating passing work in the class.
- F. Attendance Policy: Attendance is expected for this class, and each student is responsible for all material covered along with any changes to the syllabus that are discussed in class. Any foreseeable absences should be discussed with the professor beforehand. If an emergency arises, telephone or email before class so that there is a record. If I do not receive any prior notification, I will not allow make-ups for any material missed (i.e., exams, homework). Attendance is checked randomly and during tests and assignments due days. If students miss more than three classes with no excuse, there will be five percent deduction on their final grade.

Reading Assignments

Please Note:

The reading assignments listed below are intended to *supplement* the lecture materials. Some of the material in the text will not be covered in lecture but may be included on the exams. By the same token, all of the information given in lecture will not be found in the text, but may also be included on the exams. Students are expected to have read the assigned sections in the text *before* the scheduled lectures to which they apply. (Reading assignment schedule subject to change with appropriate notice).

Due days and assignments may be posted on WebCT. Students are expected to be proficient with WebCT early on the semester. webteach.csun.edu

Note: Students with exceptional needs: This instructor, in conjunction with California State University Northridge, is committed to upholding and maintaining all aspects of the federal Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973. If you are a student with a disability and wish to request accommodations, please contact the Center on Disabilities located in Student Services Building BH 110, or call (818) 677-2684 for an appointment.

http://www.csun.edu/cod/, codss@csun.edu, Phone: (818) 677-2684, Fax: (818) 677-4929, Office Hours: M - F 8:00-16:45 Any information regarding your disability will remain confidential. Because many accommodations require early planning, requests for accommodation should be made as early as possible. Any requests for accommodations will be reviewed in a timely manner to determine their appropriateness for this class.

Attention: Last day to drop is Friday of the 3rd week of classes

Please read carefully the dates that pertain to your class

	W				Reading Materials
A	31	1	Introduction, Osteology and the Skeletal		
Aug	31	1	System	Week 1	Ch. 1,2
Sep	7	2	Joint Motion and the Articular System	Week 2	Ch. 2,3
	14	3	Myology and the Muscular System	Week 3	Ch. 3,4 Review
	21	4	Catch-up day	Week 4	Ch. 4
20		_	EXAM #1	Exam #1	(Exam #1 on Ch. 1,2,3,4)
	28	5	Muscles of Movement	Week 5	Ch. 5
Oct	5	6	Muscles of Movement	Week 6	Ch. 5
	12	7	Mechanics of Movement	Week 7	Ch. 6,7
	19	8	Muscular Control of Movement	Week 8	
	19	0	Muscular Control of Movement		Ch. 5,6,7
	26	9	Assignments DueReview	Week 9	Ch. 5,6,7 Review
Nov	2	10	EXAM #2	Exam #2	(Exam #2 on Ch. 5,6,7)
		10	Walking and Running	Week 10	Ch. 8
	9	11	Walking and Running	Week 11	Ch. 8
	16	12	Jumping, Throwing, Kicking, & Lifting	Week 12	Ch. 8,9
	23	13		Week 13	Ch. 9,10
	30	13	Examples and Smorts Maximums	Exam #3	(Exam #3 on Ch. 8,9,10)
	30	15	Exercise and Sports Movements	Week 14	Ch. 10
	7	14	Assignments-Presentations-Review		
	,	14	Assignments-riesentations-Review	Week 15	Ch. 11 Review, Topics -Articles
	14	15	FINAL EXAM	Final Exam	Final Exams are comprehensive
	17	13	DEC 14, 2011 05:30 PM - 07:30 PM		Final Exams are comprehensive

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When EPC meets www.csun.edu/EPC class starts at 4:15 pm instead of 4:00: No Wednesday office hours on the above days