



*College of Health & Human Services
Department of Kinesiology*

**BACHELOR OF SCIENCE IN KINESIOLOGY
CONCENTRATION IN EXERCISE AND MOVEMENT SCIENCES**

Effective Spring 2006

The Exercise and Movement Sciences concentration prepares students for advanced study in a number of exercise and movement related fields. This degree concentration examines Kinesiology from the perspectives of exercise physiology; biomechanics; motor learning and development; and the psychological and the social-cultural aspects of physical activity. The programmatic approach is multidisciplinary and invites study in the physical, biological and social sciences, psychology, philosophy, and communication. The degree program examines those factors that influence the form, function, and effectiveness of exercise and movement across the lifespan and for the disabled.

This degree concentration will prepare students who wish to become exercise physiologists or fitness specialists in clinical, research, educational, or business settings, or who seek careers in physical or occupational therapy, biomechanics, motor learning and development, and ergonomics. Students will also be prepared for advanced study in such fields as sport history, sport sociology, sport and exercise psychology, and at-risk youth development. In addition, students who wish to pursue graduate studies in these areas will be well prepared to do so. Students will also be ready to pursue endeavors in the private sector.

PRE-REQUISITES TO CORE REQUIREMENTS (10-12 Units)

BIO 100	Human Biology ¹ (OR)	
BIO 230	Introductory Biology ¹	
BIO 328	Human Anatomy ²	3-5
MATH 124	Elementary Statistics ³	4
		3

CORE REQUIREMENTS

KIN 350	Introduction to Kinesiology ⁴	3
KIN 457	Culture, Gender and Movement ⁵	3
KIN 480	Anatomical Kinesiology ⁶	3
KIN 486	Motor Learning ⁷	3
KIN 504	Sport and Exercise Psychology ⁸	3

PRE-REQUISITE AND CORE TOTAL 25-27

CONCENTRATION: Exercise and Movement Sciences

BIO 610	Human Physiology ⁹	3
BIO 611	Human Physiology Lab ¹⁰	1
CHEM 101	Survey of Chemistry and	
CHEM 102	Survey of Chemistry Lab (OR)	
CHEM 115	General Chemistry ¹¹	4-5
PHYS 101	Conceptual Physics ¹² and	
PHYS 102	Conceptual Physics Lab ¹³ (OR)	
PHYS 111	General Physics I ¹⁴ and	
PHYS 112	General Physics I Lab ¹⁵	4
KIN 482	Exercise Physiology ¹⁶	3
KIN 483	Exercise Physiology Lab ¹⁷	1
KIN 484	Assessment in Kinesiology ¹⁸	3
KIN 485	Biomechanics ¹⁹	3
KIN 697-8	Integrative Research Seminar ²⁰ , 698 ²¹ (OR)	
KIN 699	Independent Research ²²	3
KIN Activities	3 Advisor Approved Activity Courses (KIN/DANC) ²³	3

Students must choose an emphasis area which accounts for 11-12 Units in order to complete the degree program.

THE EMPHASIS AREAS ARE AS FOLLOW:

MOVEMENT SCIENCE

Neuromuscular Science (12 Units)

KIN 487	Motor Development ²⁴	3
KIN 538	Therapeutic Exercise ²⁵	3
KIN 680	Quantitative Analysis of Human Performance ²⁶	3
KIN 636	Neuromotor Control Processes ²⁷	3

OR

Human Performance Analysis (12 Units)

KIN 325	Computer Applications in Kinesiology ²⁸	3
KIN 331	Peak Performance ²⁴	3
KIN 539	Motor Assessment of Individuals with Disabilities ²⁹	3
KIN 680	Quantitative Analysis of Human Performance ²⁶	3

SOCIAL SCIENCE

Fitness, Physical Activity, & Society (12 Units)

KIN 502	Sport and Social Issues* ²⁴	3
<i>Select 9 Units from the following courses:</i>		
KIN 300	Health Related Fitness & Wellness ³⁰	3
KIN 322	Sport in America ²⁴	3
KIN 434	Physical Activity: Youth-At-Risk ³¹	3
KIN 437	Physical Dimensions of Aging ²⁴	3
KIN 490	Introduction to Sport and Fitness Management ³²	3

* Required Course

OR

Social Science Studies in Physical Activity (11 Units)

KIN 489	History/Philosophy of Physical Activity* ²⁴	3
<i>Select a minimum of 8 Units from the following courses:</i>		
KIN 322	Sport in America ²⁴	3
KIN 331	Peak Performance ²⁴	3
KIN 434	Physical Activity: Youth-At-Risk ³¹	3
KIN 502	Sport and Social Issues ²⁴	3
KIN 620	Advanced Practicum – Kinesiology ³³	2

* Required Course

EXERCISE SCIENCE

Physiology of Fitness & Health (12 Units)

KIN 490	Introduction to Sport and Fitness Management ³²	3
KIN 555	Exercise Prescription ³⁴	3
KIN 683	Applied Exercise Physiology ³⁵	3
KIN 690	Internship ³⁶	3

OR

Fitness Programming in Youth and Elderly Populations (11 Units)

KIN 308	Instructional Analysis: Fitness Activities	2
KIN 490	Introduction to Sport and Fitness Management ³²	3
KIN 437	Physical Dimensions of Aging ²⁴	3
KIN 555	Exercise Prescription ³⁴	3

TOTAL FOR CONCENTRATION 64-68

COURSE PRE-REQUISITES

1. Credit for this course can be applied towards San Francisco State University General Education (GE) Requirements. Students may apply up to 12 GE units towards the major.
2. One course in college biology.
3. Successful completion of Entry Level Mathematics Exam (ELM), score of 550 or above.
4. GE Segment 1 with grades of C or better; upper division standing or consent of instructor. Concurrent enrollment in an activity course is recommended.
5. ENG 214 and 2 additional courses of GE Segment 1 requirements; upper division standing; Kin majors must have completed 6 units of upper division KIN courses or consent of instructor.
6. ENG 214 and two additional courses of the GE Segment 1 requirements; BIOL 328 and KIN 350 with grades of C or better; upper division standing or consent of instructor.
7. ENG 214 and two additional courses of the GE Segment 1 requirements; Kinesiology majors must have completed KIN 350 with a grade of C or better; upper division standing or consent of instructor. Concurrent enrollment in an activity course is recommended.
8. ENG 214 and two additional courses of the GE Segment 1 requirements; a course in psychology or KIN 486; upper division standing or consent of instructor.
9. BIOL 328, CHEM 101, or consent of instructor.
10. BIOL 610 (may be taken concurrently)
11. 550 or above on ELM or approved exemption, or C in MATH 70 and satisfactory score on chemistry placement exam.
12. High school algebra and score of 50 or above on ELM exam, which must be taken prior to enrollment.
13. Must be taken concurrently with PHYS 101
14. MATH 109 or equivalent. Must be taken concurrently with PHYS 112. Score of 50 or above on ELM, which must be taken prior to enrollment. Acceptable score of physics readiness test (to be administered during first week of class).
15. Must be taken concurrently with PHYS 111.
16. ENG 214 and two additional courses of the GE Segment 1 requirements; BIOL 610-611 and KIN 350 with grades of C or better; upper division standing or consent of instructor. Concurrent enrollment in KIN 483.
17. Concurrent enrollment in KIN 482.
18. Completion of quantitative reasoning requirement with a grade of C or better or consent of instructor.
19. ENG 214 and two additional courses of the GE Segment 1 requirements; MATH 124, PHYS 101 or 111, and KIN 480; upper division standing or consent of instructor.
20. ENG 214 and two additional courses of the GE Segment 1 requirements; KIN 482, KIN 485, KIN 486; upper division standing or consent of instructor. Must be taken concurrently with KIN 698. Enrollment preference given to graduating seniors.
21. ENG 214 and two additional courses of the GE Segment 1 requirements; KIN 482, KIN 485, KIN 486; upper division standing or consent of instructor. Must be taken concurrently with KIN 697. Enrollment preference given to graduating seniors.
22. Consent of associate chair and supervising instructor.
23. Advisor must pre-approve selections.
24. ENG 214 and 2 additional courses of GE Segment 1 requirements; upper division standing; or consent of instructor.
25. ENG 214 and 2 additional course of the GE Segment 1 requirements; KIN 482; Kin 480; upper division standing; or consent of instructor.
26. ENG 214 and 2 additional courses of GE Segment 1 requirements; KIN 485; upper division standing or consent of instructor.
27. ENG 214 and 2 additional courses of GE Segment 1 requirements; KIN 486; upper division standing or consent of instructor. PSY 581 or BIOL 642 is recommended.
28. ENG 214 and 2 additional courses of GE Segment 1 requirements; upper division standing; or consent of instructor. Enrollment priority to Kinesiology majors.
29. ENG 214 and 2 additional courses of GE Segment 1 requirements; KIN 536 and KIN 537; upper division standing or consent of instructor. KIN 484 and KIN 538 are recommended.
30. BIOL 100 or consent of instructor. Must be taken concurrently with an aerobic activity course.
31. Upper division or graduate standing.
32. ENG 214 and two additional courses of the GE Segment 1 requirements; upper division standing and or consent of instructor. KIN 420 and KIN490 must be taken concurrently.
33. ENG 214 and two additional courses of the GE Segment 1 requirements; upper division standing and or consent of instructor and associate chair.
34. ENG 214 and two additional courses of the GE Segment 1 requirements; KIN 482 & 483 upper division standing and or consent of instructor.
35. ENG 214 and two additional courses of the GE Segment 1 requirements; KIN 482 & KIN 483 or equivalent; upper division standing or consent of instructor.
36. ENG 214 and two additional courses of the GE Segment 1 requirements; KIN 482, KIN 483, KIN 490; upper division standing or consent of instructor. Prior completion of KIN 555 is strongly suggested.