

BACHELOR OF SCIENCE IN KINESIOLOGY: Concentration in Exercise and Movement Sciences (67-70 Units)

1 Pre-requisites Requirements (22– 24 units)

BIOL 100 Human Biology (3 units)	&	BIOL 101 Human Biology Lab (1 unit)	[1]	CHEM 101 Survey of Chemistry (3 units)	&	CHEM 102 Survey of Chemistry Lab (1 unit)	[3]		
OR				OR					
BIOL 230 Introduction to Biology (5)				[41]	CHEM 115 General Chemistry I (5 units)				[12]

Select one:

- ETHS 116 Algebra & Statistics for Social Justice (3 units) [48]
- ETHS 117 Statistics for Social Justice (3 units) [48]
- ISED 160 Data Analysis in Education (3 units) [49]
- MATH 124 Elementary Statistics (3 units) [3]
- PSY 171 Quantitative Reasoning in Psychology (3 units) [49]

2 Core Requirements (18 units)

KIN 251 Success In Kinesiology (2 units)	[1]	KIN 384GW Research Methods GWAR (3 units)	[19]
KIN 480 Anatomical Kinesiology (4 units)	[7]	KIN 457 Culture, Gender, and Movement (3 units)	[6]
KIN 486 Motor Learning (3 units)	[8]	KIN 482 Exercise Physiology (3 units)	[17]

3 Concentration Requirements (14 units)

PHYS 101 Conceptual Physics (3 units)	[14]	PHYS 102 Conceptual Physics Lab (1 unit)	[14]	KIN 404 Sports and Exercise Psychology (3 units)	[8]	KIN 485 Biomechanics (3 units)	[20]	KIN 697 Integrative Research Seminar (2 units)	[21]	KIN 699 Independent Study (3 units)	[23]	KIN 696 Kinesiology Community Internship (3 units)	[24]	
OR		OR		OR		OR		OR		OR		OR		
PHYS 111 General Physics I (3 units)	[15]	PHYS 112 General Physics I Lab (1 unit)	[16]	KIN 483 Exercise Physiology Lab (1 unit)	[18]	KIN ACTIVITY KIN activity course (1 unit)		[25]	KIN 698 Senior Research Project (1 unit)		[22]	KIN 696 Kinesiology Community Internship (3 units)		[24]

4 Electives (12 units)

Students must take 12 units of electives. Groupings of electives in three focus areas are provided below, but other groups are possible, and students should meet with an advisor to select electives that align with their career path. The movement science area focuses on the factors that influence the neuromotor control, learning, relearning, and development of motor skills and analysis; The social science area focuses on the socio-cultural and psychological factors that serve to constrain and define human movement, fitness, and physical activity; The exercise science area focuses on the physiology of exercise, fitness and health, exercise prescription, and fitness programming in healthy adults, youth, elderly, and clinical populations.

Movement Science Focus Area

- KIN 325 Computer Applications in Kinesiology (3) [30]
- KIN 437 Physical Dimensions of Aging (3) [34]
- KIN 487 Motor Development (3) [26]
- KIN 539 Motor Assessment of Individuals w/ Disabilities (3) [32]
- KIN 636 Neuromotor Control Processes (3) [29]
- KIN 680 Musculoskeletal Biomechanics and Human Mvmt (3) [28]

Social Science Focus Area

- KIN 322 Sport in America (3) [31]
- KIN 331 Peak Performance (3) [31]
- KIN 434 Sport-based Youth Development (3) [47]
- KIN 489 History/Philosophy of Physical Activity (3) [30]
- KIN 502 Sport & Social Issues (3) [31]
- KIN 510 Sport, Movement & Screen Culture (3) [31]

Exercise Science Focus Area

- KIN 310 Youth Development Instructional Analysis I (3) [45]
- (or KIN 312 Youth Development Instructional Analysis II (3)
- KIN 490 Introduction to Sport & Fitness Management (3) [36] KIN
- 555 Exercise Testing and Prescription (3) [37]
- KIN 538 Therapeutic Exercise (3) [27]
- KIN 683 Advanced Exercise Physiology (3) [38]
- KIN 690 Internship in Fitness and Wellness (3) [42]

Below are lists of courses that meet General Education Requirements. Some of these may also be used for major credit.

LEGEND

- This course may not be substituted
- • This course may be substituted with a relevant course
- () Units
- [] Course Prerequisites

Area B: Scientific Inquiry and Quantitative Reasoning

Physical Science (B1) - 3 units
PHYS 101 Conceptual Physics
CHEM 101 Survey of Chemistry
PHYS 111 General Physics I

Life Sciences (B2) - 3 units
BIOL 100 Human Biology
BIOL 212 Principles of Human Physiology
BIOL 220 Principles of Human Anatomy
BIOL 328 Human Anatomy

Physical or Life Science Lab (B3) 0-1 units
BIOL 101 Human Biology Laboratory
CHEM 102 Survey of Chemistry Laboratory
PHYS 102 Conceptual Physics Laboratory
PHYS 112 General Physics I Laboratory

Math/Quantitative Reasoning (B4) - 3 units
MATH 124 Elementary Statistics
ETHS 116 Algebra & Statistics for Social Justice
ETHS 117 Statistics for Social Justice
ISED 160 Data Analysis in Education
PSY 171 Quantitative Reasoning in Psychology

Area D: Social Sciences

Social Sciences (D1) - 3 units
KIN 255 Health-related Fitness and Wellness

Area E: Lifelong Learning & Self-Development (LLD)

BIOL 100 Human Biology
COMM 531 Conflict Resolution (4) *
KIN 255 Health-related Fitness and Wellness
KIN 331 Peak Performance
KIN 355 Science, Sport, and Fitness
RPT 380 Developmental Play Processes *

Upper Division General Education

Physical and/or Life Sciences (UD-B) - 3 units
KIN 355 Science, Sport, and Fitness
KIN 487 Motor Development

Social Sciences (UD-D) - 3 units
KIN 331 Peak Performance
KIN 502 Sport and Social Issues

Arts and/or Humanities (UD-C) - 3 units
KIN 510 Sports, Movement and Screen Culture

SF State Studies

Environmental Sustainability (ES)
KIN 255 Health-related Fitness and Wellness

Global Perspective (GP)
KIN 255 Health-related Fitness and Wellness
KIN 331 Peak Performance
KIN 457 Culture, Gender, and Movement
KIN 510 Sports, Movement and Screen Culture

Social Justice (SJ)
BIOL 100 Human Biology
KIN 255 Health-related Fitness and Wellness
KIN 331 Peak Performance
KIN 502 Sport and Social Issues
KIN 510 Sports, Movement and Screen Culture
ETHS 116 Algebra & Statistics for Social Justice
ETHS 117 Statistics for Social Justice

American Ethnicities & Racial Minorities (AERM)
KIN 502 Sport and Social Issues

1. Restricted to Kinesiology Majors. Must be taken concurrently with KIN 384 GW
2. Restricted to Biology, Biochemistry, Chemistry, Clinical Science, and Kinesiology majors with sophomore standing or above; BIOL 230 with a grade of C- or better; or consent of the instructor.
3. First-Year Math Advising Module. Students who elect to take additional support should concurrently enroll in [MATH 123](#).
4. Completion of GE Areas A and B4 requirements with grades of C or better; priority given to undeclared with interest in KIN or declared KIN major.
5. Completion of GE Areas A and B4 with grades of C or better; priority enrollment for undeclared with interest in KIN or declared KIN major.
6. KIN 384GW*; Restricted to upper-division Kinesiology majors;
7. BIOL 220 or BIOL 328 or equivalent with a grade of C or better; KIN 384GW* (may be taken concurrently). Restricted to upper-division Kinesiology majors
8. KIN 384GW* (may be taken concurrently). Restricted to upper-division Kinesiology majors
9. Category I or II placement for QR/Math. Category III or IV placement for QR/Math must have completed MATH 197 with a grade of C or better or satisfied the B4 requirement. An ELM score of 50 or higher or exemption; or MATH 70 or ESM 70 with a grade of C or better. High school chemistry recommended.
10. CHEM 101 or CHEM 115, BIOL 100 and BIOL 101 or BIOL 210, all with grades of C or better. Intended for non-Biology majors.
11. BIOL 212 (may be taken concurrently).
12. Category I or II placement for QR/Math, or ELM score of 50 or higher or exemption, or MATH 70 or ESM 70 with a grade of C or better. Category III or IV for QR/Math placement or students who have not completed MATH 70 with a grade of C or better must have completed MATH 197 with a grade of C or better or have satisfied the B4 requirement. Satisfactory score on the Chemistry readiness assessment. CHEM 100 is recommended for students needing additional preparation for the assessment and CHEM 115.
13. Category I or II placement for QR/Math, or completion of GE Area B4, or MATH 197.
14. Must be taken concurrently with PHYS 101.
15. MATH 198 or MATH 199 or equivalent with a grade of C-minus or higher. Concurrent enrollment in PHYS 112 required. If pre-calculus was completed in high school, the online Math Preparation for Physics mini-course is required; see the Department of Physics & Astronomy website for details.
16. Must be taken concurrently with PHYS 111.
17. BIOL 212*, or equivalent, KIN 240 or KIN 250, and KIN 384GW*. Restricted to upper-division Kinesiology majors.
18. BIOL 212* and BIOL 213* or equivalents with grades of C or better; KIN 384GW*; or consent of the instructor. Concurrent enrollment in KIN 482. Restricted to Upper-division Kinesiology majors.
19. Restricted to upper-division Kinesiology majors; GE Area A2; KIN 240* or KIN 250* (may be taken concurrently) and MATH 124* or equivalent with grades of C or better.
20. PHYS 101 and PHYS 102 or PHYS 111 and PHYS 112; KIN 384GW or equivalent; KIN 480*; all with grades of C or better. Restricted to upper-division Kinesiology majors.
21. Restricted to upper-division Kinesiology majors; Concurrent enrollment in KIN 698; or consent of the instructor. Enrollment priority given to graduating seniors.
22. Restricted to upper-division Kinesiology majors; concurrent enrollment in KIN 697; or consent of the instructor. Enrollment priority given to graduating seniors.
23. Restricted to upper-division standing; overall GPA of 3.0 or above; consent of the associate chair and supervising instructor.
24. Upper-division Kinesiology majors; KIN 482, KIN 483, KIN 485, KIN 486, and KIN 504; or consent of the instructor. Enrollment priority given to graduating seniors.
25. Advisor Approval.
26. Restricted to upper-division standing; GE Areas A1, A2, A3, and B4; or consent of the instructor.
27. KIN 480*; KIN 482* or KIN 355*. Restricted to upper-division standing Kinesiology majors.
28. KIN 485* with a grade of C or better; or consent of the instructor. Restricted to upper-division Kinesiology majors.
29. KIN 486* with a grade of C or better; or consent of the instructor. Restricted to upper-division Kinesiology majors.
30. Restricted to upper-division standing; KIN 250 with a grade of C or better; or consent of the instructor.
31. Restricted to upper-division standing; GE Areas A1, A2, A3, and B4.
32. KIN 384GW*; KIN 536 and KIN 537 recommended. Restricted to upper-division Kinesiology majors.
33. Completion of GE Areas A and B4 with grades of C or better; enrollment in an activity course is recommended.
34. BIOL 212*; BIOL 220* or BIOL 328*, and KIN 384GW* or equivalents with grades of C or better; GPA of 3.0 or higher; or consent of the instructor. Restricted to upper-division Kinesiology majors.
35. Upper division standing or consent of instructor; completion of GE Area A4 requirement and two additional courses in GE Areas A and B4.
36. Restricted to upper-division Kinesiology majors.
37. KIN 189 or equivalent, KIN 480, KIN 482, & KIN 483 or consent of instructor.
38. Restricted to upper-division Kinesiology majors; KIN 482* and KIN 483* with grades of C or better; or consent of the instructor.
39. KIN 255 (may be taken concurrently); fitness assessment or consent of the instructor.
40. BIOL 100 and 101, or BIOL 212 and 213.
41. Restricted to Biology and Biochemistry majors and minors, Kinesiology majors, and Environmental Studies: Natural Resources Management and Conservation majors.
42. KIN 384 GW/AR, KIN 482, KIN 483, and KIN 490. Prior completion of KIN 555 is strongly recommended. Attendance at MANDATORY meeting at the end of the semester PRIOR to enrollment is required. Upper division standing or consent of instructor; completion of GE Area A4; two additional courses in GE Areas A and B4.
43. KIN 482, KIN 483, and KIN 490; or consent of the instructor. KIN 555 is strongly recommended. Attendance at MANDATORY meeting at the end of the semester PRIOR to enrollment is required. Dates and times will be posted in the gymnasium. Restricted to upper-division Kinesiology majors.
44. KIN 250 or consent of instructor
45. KIN 240 and KIN 384GW or consent of the instructor.
46. KIN 240*, KIN 310, and KIN 384GW*; or consent of the instructor. Restricted to Kinesiology majors; upper-division standing.
47. Restricted to Kinesiology Majors; KIN 250
48. Category III or IV placement for QR/Math or students who have not passed MATH 70 or ESM 70 with C or better.
49. First-year math advising module. Students who elect to take additional support should concurrently enroll in [MATH 122](#)



College of Health & Social Sciences
Department of Kinesiology

BACHELOR OF SCIENCE IN KINESIOLOGY Concentration in Exercise and Movement Sciences

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.

Advising Students in all the programs must work closely with an advisor to select the proper degree program, concentration, and configuration of courses to support career and scholarly interest related to the study of human movement and physical activity. Students seeking to major in or change their major to kinesiology should refer to the Kinesiology Department website (<https://kin.sfsu.edu/>) for application procedures and deadlines.

The information on this handout, along with course descriptions and prerequisites, can also be found in the SFSU Bulletin (<http://bulletin.sfsu.edu/>).

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