### Pre-requisites Requirements (22 - 24 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 100 Human Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 101 Human Biology Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 101 Survey of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 102 Survey of Chemistry Lab</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 230 Introduction to Biology</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 115 General Chemistry I</td>
<td>5</td>
</tr>
</tbody>
</table>

**Select one:**
- ETHS 116 Algebra & Statistics for Social Justice (3 units) [33]
- ETHS 117 Statistics for Social Justice (3 units) [33]
- ISED 160 Data Analysis in Education (3 units) [35]
- MATH 124 Elementary Statistics (3 units) [3]
- PSY 171 Quantitative Reasoning in Psychology (3 units) [35]

### Core Requirements (18 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 251 Success In Kinesiology (2 units)</td>
<td></td>
</tr>
<tr>
<td>KIN 384 GW Research Methods</td>
<td></td>
</tr>
<tr>
<td>KIN 480 Anatomical Kinesiology (4 units)</td>
<td></td>
</tr>
<tr>
<td>KIN 486 Motor Learning (3 units)</td>
<td></td>
</tr>
<tr>
<td>KIN 482 Exercise Physiology (3 units)</td>
<td></td>
</tr>
</tbody>
</table>

**Concentration Requirements (14 units)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 101/2 Conceptual Physics (3 units)</td>
<td></td>
</tr>
<tr>
<td>PHYS 102 Conceptual Physics Lab (1 unit)</td>
<td></td>
</tr>
<tr>
<td>KIN 404 Sports and Exercise Psychology (3 units)</td>
<td></td>
</tr>
<tr>
<td>KIN 425 Biomechanics (3 units)</td>
<td></td>
</tr>
<tr>
<td>KIN 483 Exercise Physiology Lab (1 unit)</td>
<td></td>
</tr>
<tr>
<td>KIN ACTMNT KIN activity course (1 course)</td>
<td></td>
</tr>
</tbody>
</table>

### 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, sport, 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 Area Focus**
- KIN 352 Computer Applications in Kinesiology (3) [30]
- KIN 337 Physical Dimensions of Aging (3) [34]
- KIN 487 Motor Development (3) [26]
- KIN 509 Assessment of Individuals with Disabilities (3) [32]
- KIN 510 Neurosensor Control Processes (3) [29]
- KIN 503 Musculoskeletal Biomechanics and Human Movement (3) [28]

**Social Science Focus Area**
- KIN 322 Sport in America (3) [31]
- KIN 331 Research Methods I (3) [31]
- KIN 340 Sport-Based Youth Development (3) [25]
- KIN 489 History of Physical Activity (3) [8]
- KIN 502 Sport and Social Issues (3) [31]
- KIN 510 Sport, Movement & Screen Culture (3) [31]
- KIN 604 Advanced Exercise Psychology (3) [41]

**Exercise Science Focus Area**
- KIN 301/312 Youth Development Instructional Analysis I/II (3) [39]
- KIN 314 Theory and Application of Fitness Training (3) [36]
- KIN 460 Introduction to Sport & Fitness Management (3) [36]
- KIN 505 Therapeutic Exercise (3) [37]
- KIN 555 Exercise Testing and Prescription (3) [37]
- KIN 683 Advanced Exercise Physiology (3) [38]
- KIN 690 Internship (3) [42]

**General Education Requirements Met in Major:** Below are lists of courses that both GE and major requirements. This is referred to as "duplicate use of credit" or "double-counting.

### Area A: English Communications and Critical Thinking
- None

### Area B: Scientific Inquiry and Quantitative Reasoning
- Physical Science (B1) - 3 units
  - PHYS 101 Conceptual Physics
  - PHYS 111 General Physics I
- Life Sciences (B2) - 3 units
  - BIOL 100 Human Biology
  - BIOL 212 Principles of Human Anatomy
  - BIOL 325 Human Anatomy
- Physical or Life Science Lab (B3) - 0-1 units
  - BIOL 101 Human Biology Lab
  - CHEM 101 Survey of Chemistry Laboratory
  - CHEM 102 Conceptus Physics Labary
  - NURS 112 General Phys Labary
- 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 C: Arts and Humanities
- KIN 510 Sports, Movement and Screen Culture

### Area D: Social Sciences
- Social Sciences (D1) - 3 units
  - KIN 502 Health-Related Fitness and Wellness
  - KIN 502 Sport and Social Issues

### Area E: Life Long Learning and Self Development
- None

### Area F: Ethnic Studies
- None

### SF State Studies
- Environmental Sustainability (B) [5]
- KIN 250 Health-Related Fitness and Wellness
- Global Perspectives (G)
- KIN 250 Health-Related Fitness and Wellness
- KIN 257 Wellness, Fitness, and Global Perspectives
- KIN 331 Peak Performance
- KIN 487 Culture, Gender, and Movement
- KIN 510 Sports, Movement and Screen Culture

### Social Justice (S)
- KIN 250 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 Ethics & Social Minorities (AERM)
- KIN 502 Sport and Social Issues

### Upper Division General Education
- Physical and/or Life Sciences (UD-B) - 3 units
  - KIN 355 Science, Sport, and Fitness
  - KIN 487 Motor Development
- Arts and Humanities (UD-C) - 3 units
  - KIN 510 Sports, Movement and Screen Culture
- Social Sciences (UD-D) - 3 units
  - KIN 331 Peak Performance
  - KIN 502 Sport and Social Issues
NOTE: Prerequisites are subject to change. For the most up-to-date prerequisites, please visit SFSU’s bulletin page.

1. Restricted to Kinesiology Majors. Must be taken concurrently with KIN 384/GV.
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 Cor better; priority given to undeclared with interest in KIN or declared KIN major.
5. Intended for non-biology majors.
6. KIN 384/GV; Restricted to upper-division Kinesiology majors;
7. BIOL 220 or BIOL 328 or equivalent with a grade of Cor better; KIN 384/GV (may be taken concurrently). Restricted to upper-division Kinesiology majors.
8. KIN 384/GV (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 Cor better.
10. CHEM 101 or CHEM 115, BIOL 100 and BIOL 101 or BIOL 210, all with grades of Cor 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 Cor better. Category III or IV for QR/Math: placement or students who have not completed MATH 70 with a grade of Cor better must have completed MATH 197 with a grade of Cor 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. Restricted to Biology and Biochemistry majors and minors, Kinesiology majors, and Environmental Studies: Natural Resources Management and Conservation majors.
14. Must be taken concurrently with PHYS 101.
15. MATH 198 or MATH 199 or equivalent with a grade of C-minus or higher. Curricular enrollment in PHYS 112 required. If prerequisites 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 384/GV, Restricted to upper-division Kinesiology majors.
18. BIOL 212* and BIOL 213* or equivalents with grades of Cor better; KIN 384/GV; 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; MATH 124 or equivalent; all with grades of Cor better; Concurrent enrollment in KIN 255.
20. PHYS101 or PHYS102 or PHYS111 and PHYS112; KIN 384/GV or equivalent; KIN 480*; all with grades of Cor better. Restricted to upper-division Kinesiology majors.
21. Restricted to upper-division Kinesiology majors; priority enrollment for graduating seniors; KIN 404, KIN 457, KIN 482, KIN 483, KIN 485, and KIN 490; concurrent enrollment in KIN 482/489 is strongly recommended.
22. Restricted to upper-division Kinesiology majors; concurrent enrollment in KIN 467*; or consent of the instructor. Enrollment priority given to graduating seniors.
23. Restricted to upper-division standing; overall GPA 3.0 or above; consent of the appropriate 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. Restricted to Kinesiology Majors; KIN 250.
26. Restricted to upper-division standing; GE Areas A1, A2, A3, and BIOL 212; or consent of the instructor.
27. KIN 482*, KIN 486* or KIN 355*. Restricted to upper-division standing; Kinesiology majors.
28. KIN 485* with a grade of Cor better; or consent of the instructor: Restricted to upper-division Kinesiology majors.
29. Restricted to upper-division Kinesiology majors; BIOL 100 and BIOL 101 or BIOL 210, all with grades of Cor better, or consent of the instructor.
30. Restricted to upper-division standing; KIN 250 with a grade of Cor better; or consent of the instructor.
31. Restricted to upper-division standing; GE Area A1, A2, A3, and B4.
32. KIN 384/GV; Restricted to upper-division Kinesiology majors.
33. KIN 240, BIOL 220* or BIOL 328*, and KIN 384/GV or equivalents with grades of Cor better; GPA of 3.0 or higher; or consent of the instructor. Restricted to upper-division Kinesiology majors.
34. BIOL 212*, BIOL 220* or BIOL 328*, and KIN 384/GV* for students who have not passed MATH 70 or ESM 70 with Cor better.
35. BIOL 220* or BIOL 328* with grades of Cor better; GPA of 3.0 or higher; or consent of the instructor. Restricted to upper-division Kinesiology majors.
36. First-year math advising module. Students who elect to take additional support should concurrently enroll in MATH 122.
37. Restricted to upper-division Kinesiology majors.
38. KIN 480, KIN 482, KIN 485, or consent of instructor.
39. Restricted to upper-division Kinesiology majors; KIN 482* and KIN 485* with grades of Cor better; or consent of the instructor.
40. KIN 240 or KIN 250 and any GWAR course.
41. BIOL 100 and 101, or BIOL 212 and 213.
42. Restricted to upper-division Kinesiology majors; KIN 404*.
43. KIN 482, KIN 483, and KIN 490. Prior completion of KIN 555 is strongly recommended. Attendance at MANDATORY meeting at end of the semester PRIOR to enrollment is required. Upper division standing or consent of instructor; completion of GE Area A2; two additional courses in GE Areas A and B4.

NOTE: Prerequisites are subject to change. For the most up-to-date prerequisites, please visit SFSU’s bulletin page.

College of Health & Social Sciences
Department of Kinesiology

BACHELOR OF SCIENCE IN KINESIOLOGY
Concentration in Exercise and Movement Sciences

Updated Fall 2022

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 exercise psychology, and urban 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.

Undergraduate students interested in pursuing a master’s degree in kinesiology should speak to their academic advisor after completing core requirements in the program (KIN 251, KIN 384, KIN 457, KIN 480, KIN 486, and KIN 482).

Please visit the following site for additional information on our Bachelor of Science in Kinesiology: Concentration in Exercise and Movement Sciences:
https://bulletin.sfsu.edu/colleges/health-social-sciences/kinesiology/bachelor-concentration-exercise-movement-sciences/

Department of Kinesiology | San Francisco State University | 1600 Holloway Ave. - Gym 1010 | San Francisco, CA 94132-4161 Hours: Monday-Friday 8am-5pm | Email: kinesio@sfsu.edu | Phone: (415) 338-2244 | Fax: (415) 338-7566

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