## Bachelor of Science in Kinesiology: Concentration in Exercise and Movement Sciences

### Roadmap – Quantitative Reasoning Category I/II and Stretch English

120 Total Units Required  
Minimum Number of Units in the Major: 67

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

### Course Title | Units
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**First Semester**  
ENG 104 | Writing the First Year: Finding Your Voice Stretch I | 3  
Quantitative Reasoning Prerequisite (3-4 units) - Take One | 3-4  
GE Area A | 3  
GE Area C | 3  
GE Area D | 3  
**Units** | 15-16
**Second Semester**  
Select One (Major Prerequisite): | 4-5  
BIOL 100 & BIOL 101 | Human Biology and Human Biology Laboratory (B2, B3, S,J, Prerequisite for BIOL 220) |  
BIOL 230 | Introductory Biology I (Prerequisite for BIOL 328) |  
ENG 105 | Writing the First Year: Finding Your Voice Stretch II (A2) | 3  
GE Area A | 3  
GE Area C | 3  
GE Area D | 3  
**Units** | 16-17
**Third Semester**  
Select One (Major Prerequisite): | 4  
BIOL 220 | Principles of Human Anatomy |  
BIOL 328 | Human Anatomy |  
Select One (Major Prerequisite): | 4-5  
CHEM 101 & CHEM 102 | Survey of Chemistry and Survey of Chemistry Laboratory (B1, B3) |  
CHEM 115 | General Chemistry I: Essential Concepts of Chemistry |  
GE Area C | 3  
GE Area E | 3  
**Units** | 14-15
**Fourth Semester**  
BIOL 212 & BIOL 213 | Principles of Human Physiology and Principles of Human Physiology Laboratory (Major Prerequisite) | 4  
KIN 250 | Introduction to Kinesiology (Major Prerequisite) | 3  
Select One (Major Concentration): | 4  
PHYS 101 & PHYS 102 | Conceptual Physics and Conceptual Physics Laboratory (B1, B3) |  
PHYS 111 & PHYS 112 | General Physics I and General Physics I Laboratory (B1, B3) |  
GE Area F | 3  
**Units** | 14
**Fifth Semester**  
KIN 251 | Success in the Kinesiology Major (Major Core) | 2  
KIN 384GW | Research Methods in Kinesiology - GWAR (Major Core) | 3  
KIN 404 | Sport and Exercise Psychology (Major Concentration) | 3  
Major Activity Requirement | 1  
GE Area UD-B: Upper-Division Physical and/or Life Sciences (Consider SF State Studies Course) | 3  
GE Area UD-C: Upper-Division Arts and/or Humanities (Consider SF State Studies Course) | 3  
**Units** | 15
**Sixth Semester**  
KIN 457 | Culture, Gender and Movement (Major Core, GP) | 3  
KIN 480 | Anatomical Kinesiology (Major Core) | 4  
Major Electives (12 units total) - Take Two | 6  
U.S. and California Government (http://bulletin.sfsu.edu/undergraduate-education/american-institutions/ugsg) | 3  
**Units** | 16
### Seventh Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN 482</td>
<td>Exercise Physiology (Major Core)</td>
<td>3</td>
</tr>
<tr>
<td>KIN 483</td>
<td>Exercise Physiology Laboratory (Major Concentration)</td>
<td>1</td>
</tr>
<tr>
<td>KIN 485</td>
<td>Biomechanics (Major Concentration)</td>
<td>3</td>
</tr>
<tr>
<td>KIN 486</td>
<td>Motor Learning (Major Core)</td>
<td>3</td>
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<tr>
<td>Major Electives (12 units total) - Take One</td>
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<tr>
<td>GE Area UD-D: Upper-Division Social Sciences (Consider SF State Studies Course)</td>
<td>3</td>
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<td><strong>Units</strong></td>
<td></td>
<td><strong>16</strong></td>
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### Eighth Semester

**Select One (Major Concentration):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>KIN 696</td>
<td>Kinesiology Community-Based Internship</td>
<td>3</td>
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<tr>
<td>KIN 697 &amp; KIN 698</td>
<td>Integrative Research Seminar and Senior Research Project</td>
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<tr>
<td>KIN 699</td>
<td>Independent Study</td>
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<td>Major Electives (12 units total) - Take One</td>
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<tr>
<td>SF State Studies or University Elective - Take Three</td>
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<td>3</td>
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<tr>
<td><strong>Units</strong></td>
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<td><strong>14</strong></td>
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**Total Units**: 120-123

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1. ENG 114 can only be taken if you complete Directed Self-Placement (DSP) and select ENG 114; if you choose ENG 104/ENG 105 through DSP you will satisfy GE Area A2 upon successful completion of ENG 105 in the second semester; multilingual students may be advised into alternative English courses.

2. To determine the best B4 course option, students should complete the online advising activity at mathadvising.sfsu.edu (https://mathadvising.sfsu.edu/). Questions? Contact Gator Smart Start. (https://gatorsmartstart.sfsu.edu/)

3. **Quantitative Reasoning Requirement (3-4 units)**
   - Select One:
     - ETHS 116 Algebra and Statistics for Social Justice (4 units) (B4, SJ)
     - ETHS 117 Statistics for Social Justice (3 units) (B4, SJ)
     - ISED 160 Data Analysis in Education (3 units) (B4)
     - MATH 124 Elementary Statistics (3 units) (B4)
     - PSY 171 Quantitative Reasoning in Psychology (3 units) (B4)

4. To avoid taking additional units, it is recommended that you meet the SF State Studies (AERM, GP, ES, SJ) requirements within your GE or major.

5. **Activity Requirement (1 Unit)**
   - With prior approval of advisor, select one activity course (KIN prefix) representing a fitness-related activity or movement form that complements and enhances the student’s personal fitness and movement profile.

6. **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 units)
   - KIN 437 Physical Dimensions of Aging (3 units)
   - KIN 487 Motor Development (3 units) (UD-B)
   - KIN 538 Therapeutic Exercise (3 units)
   - KIN 539 Motor Assessment of Individuals with Disabilities (3 units)
   - KIN 636 Neuromotor Control Processes (3 units)
   - KIN 680 Musculoskeletal Biomechanics and Human Movement (3 units)

   **Social Science Focus Area**
   - KIN 322 Sport in America (3 units)
   - KIN 331 Peak Performance (3 units) (UD-D, GP, SJ)
   - KIN 434 Sport-Based Youth Development (3 units)
   - KIN 489 History and Philosophy of Sport and Physical Activity (3 units)
   - KIN 502 Sport and Social Issues (3 units) (UD-D, AERM, SJ)
   - KIN 510 Sport, Movement, and Screen Culture (3 units) (UD-C, GP, SJ)

   **Exercise Science Focus Area**
   - KIN 310 Youth Development Instructional Analysis I (3 units)
   - KIN 312 Youth Development Instructional Analysis II (3 units)
   - KIN 437 Physical Dimensions of Aging (3 units)
   - KIN 490 Introduction to Sport and Fitness Program Management (3 units)
   - KIN 538 Therapeutic Exercise (3 units)
   - KIN 555 Exercise Testing and Prescription (3 units)
   - KIN 683 Advanced Exercise Physiology (3 units)
   - KIN 690 Internship in Fitness/Wellness (3 units)

7. Given catalog rights, fall 2022 transfer students do not need to complete an Area F course.