# KINESIOLOGY Exercise Science, B.S. (120 Units) Valid for Catalog Years: 2023/2024 to Current

Kinesiology Core Lower Division Requirements		9 Units □		
KINES 1: Introductory Principles and Techniques for Physical Fitm	uess Development (3)			
<u>KINES 32:</u> Lifetime Fitness and Wellness (2) (GE Area E)				
AND Concurrent Enrollment in any Kinesiology Activity Course (1)				
KINES 33: Foundation of Sport Exercise Psychology (3)	()			
Examples Salamas Tion 1 (Lower Division) Dequinements		5 - 8 Units 🗆		
Exercise Science Tier 1 (Lower Division) Requirements BIOL 67A: Human Anatomy & Physiology I ( <i>Pre-Requisite:</i> BIOL	[14  & CHEM  14/14] [or $34$ ]: OP BIOL 20) (4) AND	5 - 8 Unus 🗆		
BIOL 67B: Human Anatomy & Physiology I ( <i>Pre-Requisite:</i> BIO BIOL 67B: Human Anatomy & Physiology II ( <i>Pre-Requisite:</i> BIO				
<b>OR</b> <u>BIOL 33:</u> Introductory Human Anatomy and Physiology (1)				
on <u>brob 55.</u> Infoductory Human Anatomy and Physiology (s				
Exercise Science Tier 2 (Upper Division) Requirements		6 Units 🗆		
KINES 116: Fundamentals of Biomechanics (3) (Pre-Requisite: BIOL 33 OR BIOL 67A)				
KINES 118: Fundamentals of Exercise Physiology (3) (Pre-Requise	ite: BIOL 33 OR BIOL 67A & BIOL 67B)			
Exercise Science Tier 3 Requirements (Senior Standing 190+ U	nits  Required)	<i>12 Units</i> <b>D</b>		
KINES 119: ECG and Clinical Exercise Physiology (3) (Pre-Requi				
<u>KINES 163:</u> Fitness and Wellness (3) ( <i>Pre-Requisite:</i> KINES 32 & KINES 118; can be taken concurrently)				
KINES 165: Performance Related Fitness (3) (Pre-Requisite: KINI	• ·			
KINES 167: Integrative Exercise Science (3) (Pre-Requisite: KINE	ES 116 & 118; can be taken concurrently)			
Exercise Science Core Program Requirements		9 Units 🗆		
KINES 109: Motor Learning (3)		, enus 🗆		
<b>OR</b> <u>KINES 110:</u> Motor Development (3) [Generally Restricted to	to PE Option]			
KINES 121: Body Composition: Theory, Principles, and Managem				
KINES 137: Structural Biomechanics (3) (Pre-Requisite: BIOL 67.				
Exercise Science Electives (Select 21 units from the following; 1		21 Units 🗆		
BIOL 1A: Introductory Biology (GE B2) (4)	<u>NUTR 53:</u> Nutrition and Health (GE E) (3)			
BIOL 1B & 1BL: Introductory Biology (BIOL 1A) (4)	NUTR 54: Elementary Nutrition (3)			
BIOL 10: Life Science (GE B2) (3) BIOL 20: Introductory Microbiology (CHEM 14/14)	NUTR 147: Nutrition and the Athlete ( <i>NUTR 53 or 54</i> ) (3)			
BIOL 20: Introductory Microbiology (CHEM 1A/1AL or CHEM 3A) (4)	NUTR 153: Advanced Nutrition (NUTR 54, BIOL 67A, BIOL 67B, and CHEM 150) (3)			
BIOL 102: Genetics (BIOL 1A, BIOL 1B/1BL, and CHEM 8 or	<u>PH 48:</u> First Responder and Emergency Care (3)			
CHEM 128A; CHEM 8 or 128 can be concurrent) (3)	<u>PH 92:</u> Public Health Statistics (3)			
<u>BIOL 103:</u> Cellular Biology ( <i>BIOL 102, CHEM 150 or 155A</i> ) (3)	<u>PH 109:</u> Epidemiology of Disease (PH 92, MATH 11, PSYCH			
BIOL 144: Neuroanatomy (BIOL 33 or BIOL 64 or BIOL 65) (4)	$\frac{1}{42, \text{ or } DS 73}$ (3)			
BIOL 166: Neurophysiology (BIOL 33 or BIOL 67A or BIOL	PH 114: Health Behavior (3)			
67B or BIOL 103 or BIOL 162) (3)	PH 128S: Holistic Health and Alternative Medicine (MI) (3)			
CHEM 1A & 1AL: General Chemistry 1A (GE B1) (5)	PH 141: Applied Ergonomics (3)			
CHEM 1B & 1BL: General Chemistry 1B (5)	PHYS 2A: General Physics (MATH 6 or DS 71 or MATH			
CHEM 3A: Introductory General Chemistry (GE B1) (4)	75/75A or MATH 70) (GE B1) (4)			
CHEM 3B & 3BL: Introductory Organic and Biochemistry	PHYS 2B: General Physics (PHYS 2A w/ C grade) (4)			
(CHEM 3A) (4)	<u>PSYCH 10</u> : Introduction to Psychology ( <b>GE D2</b> ) (3)			
<u>CHEM 8:</u> Elementary Organic Chemistry ( <i>CHEM 1B or 3A</i> ) (3)	<u>PSYCH 42:</u> Introductory Statistics (4)			
<u>CHEM 128A/129A:</u> Organic Chemistry/Organic Chemistry Lab (CHEM 1B or CHEM 8; 129A concurrently w/ 128A) (5)	<u>PSYCH 66:</u> Abnormal Psychology (3) <u>PSYCH 155:</u> Developmental Psychology (4)			
(CHEM 1B or CHEM 8; 129A concurrently w/ 128A) (5) CHEM 128B/129B: Organic Chemistry/Organic Chemistry Lab	<u>PSYCH 155:</u> Developmental Psychology (4) <u>PSYCH 169:</u> Psychological Aspects of Physical Disability (3)			
(CHEM 129B; 129B; organic Chemistry Organic Chemistry Lab (CHEM 129A; 129B concurrently w/ 128B) (5)				
<u>CHEM 1297</u> , 1295 concurrently w 1265 (5) <u>CHEM 150:</u> General Biochemistry (CHEM 3B or CHEM 8, or	<u>Any KINES Academic Course</u> (other than those required for the Exercise Science option; no more than one unit of KINES 43)			
both CHEM 128A and CHEM 128B) (3)	Any Additional KAC Course (no more than three additional			
CHEM 155A: Fundamentals of Biochemistry (CHEM 128B) (3)	KAC courses can be applied to the major; repeated KAC	Remaining Electiv		
MATH 11/11L: Elementary Statistics (GE B4) (3)	courses cannot be counted)	Units:		
Total Units Required in Major	65 units			
Total Units Required in General Education	49 units			
General Electives Needed	0-15 units			



College of Health and Human Services

Advising and Career Development Center

PRE-HEALTH Exercise Science Option (120 Units) Valid for Catalog Years: 2023/2024 to Present For assistance or to schedule an advising appointment, please contact the CHHS Advising and Career Development Center: 559-278-5027, McLane Hall 194

Student Name: \_\_\_\_\_

Student ID: \_\_\_\_\_

Catalog Year:

	Year 1 (Freshman)		Year 2 (Sophomore)		Year 3 (Junior)		Year 4 (Senior)		Elective Options:	
	Fall	Spring	Fall		Spring	Fall	Spring	Fall	Spring	Elective Options.
Units	16 Units	15 Units	15 Units		15 Units	15 Units	15 Units	15 Units	15 Units	
Major	GE Area Al	<u>GE Area B1</u> CHEM 1A + 1AL	<u>GE Area B2</u> BIOL 1A + Lab	TRANSITION INTO KI	BIOL 67A (4 Units)	BIOL 67B (4 Units)	KINES 116 + Lab (3 Units)	KINES 119 (3 Units)	KINES 165 + Lab (3 Units)	Athletic Training M.S. Pre-Requisites <sup>1</sup> Biology w/ Lab (BIOL 10 or BIOL 1A)         Chemistry w/ Lab (CHEM 3A)         Physics w/ Lab (PHYS 2A)         2 Semesters of Anatomy & Physiology w/ Lab (BIOL 67A & 67B)         General Psychology or Sport Psychology (PSYCH 10 or KINES 33)         Fundamentals of Biomechanics (KINES 116)         Exercise Physiology (KINES 118)         Nutrition or Fitness & Wellness (NUTR 53 or KINES 163)         Statistics (PH 92 or MATH 11)         Introduction to Athletic Training (KINES 43) OR 100 hours of observation         First Aid 7 CPR or EEC Card (PH 48 or 49)         Doctor of Physical Therapy Pre-Requisites <sup>1</sup> Human Anatomy w/ Lab (BIOL 67A or BIOL 64)         Human Physiology w/ Lab         (BIOL 67B or BIOL 65)         Life Science w/ Lab [Beginning Fall 2022)
	GE Area A2	GE Area C2 <sup>1</sup> OR ENGL 5B	<u>GE Area E</u> KINES 32 + KAC		KINES 1 (3 Units)	KINES 109 or 110 (3 Units)	KINES 118 + Lab (3 Units)	KINES 163 (3 Units) + Lab	KINES 167 (3 Units)	
	GE Area A3	GE Area D2	GE Area C1/C2	KINESIOLOGY -	KINES 33 (3 Units)	KINES Elective	KINES 121 (3 Units)	KINES 137 (3 Units)	KINES Elective	
	GE Area B4	GE Area F	GE Area D2	- EXERCISE S	Upper Division GE	KINES Elective	KINES Elective	KINES Elective	KINES Elective	
	GE Area Cl	Cl		SCIENCE	Upper Upp	Upper Multicultural		KINES	<ul> <li>(BIOL 1A or BIOL 10)</li> <li>□ Part One of General Chemistry series w/ Lab (CHEM 1A/1AL OR CHEM 3A)</li> </ul>	
	HHS 18	HHS 1001			CE MAJOR		Division GE	International	ational (W Course or Exam)	Elective
Milestones	HHS 18 Completed	HHS 100T Completed	Apply for Ex. Sci Major	<b>IOR</b>		Anatomy/ Physiology Completed	KINES 116/118 Completed		Tier 3 Courses Completed	<ul> <li>Semester Two of General Physics w/ Lab (PHYS 2B)</li> <li>General Psychology, Developmental Psychology, or Lifespan Psychology (PSYCH 10, 123, or 155)</li> <li>Abnormal Psychology or Psychological Aspects of Disability (PSYCH 66 or 169)</li> <li>Basic Statistics (MATH 11, PH 92, or PSYCH 42)</li> </ul>

#### **Advising Notes**

1. Students interested in Athletic Training or Physical Therapy should consult the respective department for program advising, additional admission criteria, and equivalent pre-requisites.

2. A grade of C or higher in all required coursework is necessary for successful completion of the major. Any course required as a prerequisite must be completed with a grade of C or better before registration in the subsequent courses

3. CR/NC grading is not permitted in courses for the kinesiology major, except in those courses which are designated CR/NC grading only.

4. Courses taken within the Kinesiology major may be used toward general education requirements, a minor (see departmental minors) or a supplemental credential. Consult the appropriate department for further information.

5. Students majoring in kinesiology may count a maximum of 12 units of activity courses (ATHL, KAC, DANCE) toward the 120 units required for a bachelor's degree. Repeat credit towards the major is not allowed in these courses.

# 2024-2025 GENERAL EDUCATION (G.E.) REQUIREMENTS

NOTES: A minimum of 48 G.E. units are required. All classes are three or more semester units. Engineering and Liberal Studies majors complete a different G.E. Pattern-consult department advisor. GE courses may change annually. It is recommended to run your Degree Progress Report (DPR) before and after you register to ensure courses you are registered for satisfy the intended GE Area(s).

#### **+ FOUNDATION**

<ul> <li>Four courses: One in Al, one in A2, one in A3, &amp; one in 84 for a minimum of 12 units.</li> <li>FOUNDATION courses must be satisfied with a minimum of "C" grade.</li> <li>Area A - Fundamental Skills and Knowledge</li> <li>A1 Oral Communications: Communication 3, 7, 8</li> <li>A2 Written Communication: (Pre-Requisite for English 5B is Passing 5A) English 5B, 5BML, 10, 10ML</li> <li>A3 Critical Thinking: Africana Studies 20; Anthropology 30; Asian American Studies 88; Chicano &amp; Latin American Studies 30; College of Science and Math 10; Communication 5; Geography 25; Interdisciplinary 50; Natural Science 4; Philosophy 24, 45; Sociology 3, 35; Women's, Gender, &amp; Sexuality Studies 12</li> <li>B4 Quantitative Reasoning: (Co-Requisite or Pre-Requisite Math Courses May Be Required; Check with an Advisor) Criminology 50; Decision Science 71, 72; Mathematics 6, 11, 11L, 45, 45L, 70, 75A; Psychology 42; Public Health 92</li> </ul>	Course/ <u>Units/Grade</u> A1 A2 A3 B4		
BREADTH	1		
Area B - Fundamental Skills and Knowledge Two Courses: One in B1 and one in B2 - See above for B4	B1		
B1 Physical Sciences: (Pre-Requisite: Completion of B4) Chemistry 1A & 1AL, 3A, 10; Earth & Environmental Sciences 1, 1V, 4, 5; Geography 5*, 7*;	B2		
Physical Science 21; Physics 2A, 4A & 4AL, 10	ВЗ		
B2 Life Sciences: Biology 1A, 10, 11, 12 B3 Laboratory Component: B1 or B2 must have a lab (*Courses do not have a lab component)			
	]		
Area C - Arts and Humanities	C		
Three Courses: One in C1, one in C2, and a third from C1 or C2	C1		
Cl Arts: Armenian Studies 20; Art 1, 20, 40, 50; Art History 10, 11, 12; Chicano & Latin American Studies 9; Drama 22, 62; English 41, 43, 44; Media, Communications & Journalism 9; Music 9 (not for music majors), 9A, 74, 75	C2		
C2 Humanities: Arabic 1A, 1B; Armenian 1A, 1B, 2A; Chinese 1A, 1B; Communicative Sciences & Deaf Studies 90, 92; English 20, 30; French 1B, 2A, 2B;	Cl or		
German 1B, 2A, 2B; Greek 1A, 1B; Hebrew 1A; Hmong 1A, 1B; Humanities 10, 11, 15, 20; Italian 1A, 1B, 2A, 2B; Japanese 1A, 1B; Latin 1A, 1B; Linguistics 10, Persian 1A, 1B; Philosophy 1, 2, 10, 20; Portuguese 1A, 1B; Spanish 1B, 2A, 2B, 3, 4A, 4B	C2		
<ul> <li>Area D - Social, Political &amp; Economic Institutions and Behavior, Historical Background One course in each sub-area (Pre-Requisite: GE Foundation A2 for students in English college-readiness Category III and IV)</li> <li>D1 American History: History 11, 12</li> <li>D2 Social Science: Africana Studies 36; Agricultural Business 1; American Indian Studies 50; Anthropology 2, 3; Armenian Studies 10; Asian American Studies 7, 166; Child &amp; Family Science 31; City &amp; Regional Planning 80; Communicative Sciences &amp; Deaf Studies 98; Criminology 10; Economics 25, 40, 50; Geography 2, 4; History 20, 21; Industrial Technology 20; Jewish Studies 10; Media, Communications &amp; Journalism 1; Middle East Studies 10; Political Science 1; Psychology 10; Sociology 1 or 15; Women's, Gender, &amp; Sexuality Studies 10, 11, 166</li> </ul>			
Area E - Lifelong Understanding & Self-Development One course Animal Science 67; Art 13; Asian American Studies 8; Child & Family Sciences 38, 39; College of Science and Math 15; Dance 16, 70; Drama 32; Finance 30; Gerontology 10S, 18, 111; Kinesiology 32 & Concurrent Enrollment in any KAC; Linguistics 30; Nutrition 53; Peace and Conflict Studies 110; Psychology 61; Public Health 90, 91, 110; Recreation Administration 80; University 1; Women's, Gender, & Sexuality Studies 18			
Area F - Ethnic Studies One course Africana Studies 10, 15, 27, 40, 68; American Indian Studies 5, 10, 103; Anthropology 120, 175; Asian American Studies 10, 15, 20, 50, 108, 120, 143, 175, 185; Chicano & Latin American Studies 3, 5, 120, 128, 163; Media, Communications, & Journalism 6; Philosophy 108	F		
<b>UPPER DIVISION G.E. CONSISTS OF 9 UNITS</b> IB, IC, & ID courses can be taken no sooner than the term in which 60 units of coursework are completed.			
♦ INTEGRATION Three Upper Division – One in Each Area	-		
<ul> <li>IB - Physical Universe &amp; Its Life Forms: (Pre-Requisite: Completion of FOUNDATION and Area B)         Anthropology 161; Chemistry 170; Civil Engineering 121; Computer Science 100, 100N; Earth &amp; Environmental Science 102S, 112, 167, 168; Geography 115, 128, 129;         Natural Science 115, 120, 121, 125; Physical Science 131, 168; Physics 100; Plant Science 105; Public Health 161; Sociology 158</li> <li>IC - Arts &amp; Humanities: (Pre-Requisite: Completion of FOUNDATION and Area C)         Africana Studies 129; Architectural Studies 145; Armenian 148; Art 102; Art History 140; Arts &amp; Humanities 105; Asian American Studies 148; Chicano &amp; Latin         American Studies 130; Dance 171; Drama 163; English 101, 102, 103, 112, 113, 114, 174; French 109, 124, 125, 149; Humanities 104, 108, 110, 118, 120, 129;         Interdisciplinary Art Studies 108; Italian 110, 130; Jewish Studies 108; Linguistics 115, 130, 138; Media, Communications, &amp; Journalism 183; Music 170A, 171, 187;         Philosophy 120, 150, 151; Portuguese 101, 102, 103; Spanish 125, 129; Women's, Gender, &amp; Sexuality Studies 110, 111</li> </ul>			
ID - Social, Political, & Economic Institutions & Behavior, Historical Background: (Pre-Requisite: Completion of			
FOUNDATION, Area D, and PLSI 2) Africana Studies 144; Agricultural Business 155; Anthropology 116W, 145; Art History 143; Asian American Studies 111, 121, 122, 155; Chicano & Latin American Studies 114, 115; City & Regional Planning 125; Civil Engineering 16]; Construction Management 124; Criminology 101, 120, 1205; Curriculum & Instruction 152; Earth and Environmental Sciences 1155; Economics 146, 167, 176, 183; Electrical & Computer Engineering 118; Forensic Behavioral Science 153; Geography 133, 173; Gerontology 100; History 101, 154; Jewish Studies 122; 154; Kinesiology 111; Media, Communications & Journalism 101, 175, 178, 180; Peace & Conflict Studies 100, Social Science 110; Sociology 131, 143, 163; Women's, Gender, & Sexuality Studies 101, 124, 149, 155	ID		

# **Graduation Requirements**

PLANNING YOUR I	DEGREE			
Meet with an Academic Counselor to complete a My Degree Plan (roadmap)				
<ul> <li>Units per semester to graduate:</li> <li>4years: 15 units x 8 semesters = 120 units</li> <li>5 years: 12 units x 10 semesters = 120 units</li> </ul>				
Complete your US and California Government requirement	ent during your sophomore year			
Complete your upper-division writing skills during your	unior year (60 - 90 units)			
Complete your Application for Degree and pay the fee d	uring the first four weeks of your final semester			

# 120 unit minimum—comprised of:

- 48 General Education (or modified version per Major)
- Major
- Electives if needed to reach 120 units (minor/certificate/other)

#### • 2.00 GPA in:

- Major
- Campus units
- Cumulative units

#### • Specific course requirements:

- English Composition (GE Area A2-English 5A & 5B, 10 or equivalent) -
- US History (GE Area D1—History 11, 12 or equivalent) -
- US and California Government -

Courses: Political Science 2, or equivalent course

Multicultural/International course (M/I)

Courses: Africana Studies 143, 150, 164; Anthropology 105W, 120, 123, 125; Art History 141, 142; Asian American Studies 110, 110S, 138, 140; Business Administration 104; Capstone 177, 188S; Chicano & Latin American Studies 160, 170; Communication 164; Child & Family Science 134; Communicative Disorders & Deaf Studies 139; Economics 181; Geography 167, 174; Gerontology 161; History 186; Humanities 105, 140; Italian 100; Jewish Studies 143; Linguistics 147; Media, Communication 8 Journalism 176, 179; Marketing 100S; Music 171A; Nursing 141, 141LS; Public Health 104, 128S; Philosophy 131, 132; Political Science 120; Recreation Administration 130; Social Sciences 180; Sociology 111, 142; Social Work 136; Women's, Gender, & Sexuality Studies 120, 122, 135

# Writing Skills Requirement:

Completed Course:

Completed Course:

Upper-division writing skills

**Courses:** Africana Studies 104W; Agricultural Business 170WS; American Indian Studies 105WS; Anthropology 105W, 116W, 126W; Asian American Studies 151W, 161W; Aerospace Studies 105AW\*, 105BW; Biology 118W; Business Administration 105W; Chemistry 161W\*; Chicano & Latin American Studies 102W; Economics 102W; Earth & Environmental Sciences 104W, 135W; English 106W, 115W, 117W\*, 160W, 170W; Engineering 105W\*; Health & Human Services 116W; History 100W\*; Industrial Technology 198W; Jewish Studies 100W; Literacy & Early Education 180W; Linguistics 110W\*, 111W; Media, Communications & Journalism 102W\*, 114W\*, 155SW, 158WS ; Philosophy 125W, 133W; Plant Science 110W; Political Science 100W; Sociology 130W, 130WS; Women's, Gender, & Sexuality Studies 118W

Note: a few majors require a specific "W" course; see catalog requirements for your major Completed Course: \*Enrollment may be restricted or have additional prerequisites. Check the course description in the catalog or my.fresnostate.edu

# • Fresno State Residency unit minimums:

- 30 units
- 24 upper-division units
- 12 units in major
- 9 General Education units

Please Note: General Education course area completion is based on which area the course fulfills during the semester the course is completed, not catalog year. Be sure to double check courses are completing the intended area using the class search or degree progress report (DPR).