Advising Course Plan - Health Science Major - Kinesiology/Exercise Science Interest

Kinesiology/Exercise Science is a rapidly expanding field with strong career prospects (e.g. health department settings, federal agencies, prevention research centers, physiological/medical research centers, academic settings, health coach/personal training, and professional, commercial, and nonprofit organizations). Those interested in pursuing a career in Kinesiology/Exercise Science will apply directly to their program(s) of choice. Requirements and prerequisites will differ somewhat between programs, but required courses generally include introductory biology, anatomy & physiology, general chemistry, and preferred courses include biomechanics, exercise physiology, and therapeutic exercise. A background in biochemistry is also beneficial for most Masters programs; therefore, a year of organic chemistry prior to this is helpful, though again not required. Additionally, more Kinesiology programs use calculus-based information, especially in biomechanics-focused graduate programs, so calculus may be advisable to take as well.

Furthermore, it is important to verify that the research focus of the program(s) you are applying to match with your own. In some cases, a faculty sponsorship at the university is required (e.g. at the University of Maryland (https://sph.umd.edu/department/knes/graduate-student-application-information (https://sph.umd.edu/department/knes/graduate-student-application-information/)). Please be sure to look at an early stage at various graduate program requirements for different universities and areas. Your required and elective courses as an HLSC major will prepare you well for graduate work in this growing, evolving field, which has as its main focus prevention and treatment of chronic disease using a multi-pronged approach. Related to this approach, many Masters and Ph.D. programs in Kinesiology (e.g. at the University of South Carolina http://www.sph.sc.edu/exsc/grad.htm) are now focusing on epidemiology and public health in this approach to combatting chronic disease, so related courses in Public Health Studies – perhaps even as a minor - will benefit you as well as an applicant to such programs.

Sample Schedule (Note: This sample schedule is more rigorous than required (e.g. it includes a chemistry minor which is beneficial though more than is required by most graduate programs in Kinesiology), but it would make an applicant attractive to top graduate programs).

First Year		
Fall		**Units**
BIOL 141P[1,*]	Introductory Biology: Biochemistry, Cell Biology and Molecular Genetics	1
HLSC 119V	Health and Wellness	1
FSEM 100[1]	First Year Seminar (unless transfer student)	1
General Education requirement[1]		1
	Term Units	**4**
Spring		
BIOL 142P[1,*]	Introductory Biology: Animal and Plant Physiology	1
PSYC 101S[1]	Introduction to Psychology	1
MATH 141Q	Calculus I with Analytic Geometry (or General Education requirement (A, B, H, L course))	1
General Education requirement (A, B, H, L course)		1
	Term Units	**4**
Second Year		
Fall		
MATH 141Q should be taken at some point during this year if it was not taken in First Year.		
HLSC 201[1]	Anatomy Physiology I	1
CHEM 141P[*]	General Chemistry I	1
BIOL 301[*]	Microbiology	1
PUBH 284	Foundations of Epidemiology	1
	Term Units	**4**
Spring		
CHEM 142P[*]	General Chemistry II	1
HLSC 202[1]	Anatomy and Physiology II	1
MATH 125Q	Introduction to Mathematical and Statistical Modeling	1
PUBH 140V	Introduction to Public Health	1
	Term Units	**4**
Summer		
Take GRE exam in preparation for graduate school applications - by the end of summer before Fourth Year.		
	Term Units	**0**
Third Year		
Fall		
Junior Seminar must be taken during this year.		
Junior Seminar		1
CHEM 201[*]	Organic Chemistry I (HLSC elective)	1
PHYS 121P or 141P[*]	College Physics I University Physics I	1
COMM 108	Public Speaking	1
	Term Units	**4**
Spring		
HLSC 498[1]	Senior Research Proposal	1
CHEM 301[*]	Organic Chemistry II (HLSC elective)	1
PHYS 122P or 142P[*]	College Physics II University Physics II	1
COMM 108	Public Speaking	1
	Term Units	**4**
Fourth Year		
Fall		
HLSC 499[1]	Senior Research Project	1
CHEM 204[*]	Biochemistry I	1
HLSC 411[1]	Exercise Physiology	1
General Education requirement (A, B, H, L course)[1]		1
	Term Units	**4**
Spring		
CHEM 200+ level course that meets Chemistry requirement		1
HLSC 313[*]	Biomechanics (HLSC elective)	1
General Education requirement (A, B, H, L course) or elective[1]		1
General Education requirement (A, B, H, L course) or elective[1]		1
	Term Units	**4**
Total Unit: 32		

[1] Required for HLSC major.
[2] PUBH 284 counts as an HLSC elective.
[3] PUBH 140V counts as an HLSC elective.
* Common core of prerequisite course work.