

## EXERCISE SCIENCE MAJOR PRE-MED COURSE SEQUENCE – 4yr to MCAT

The following course sequence is recommended; however, there is flexibility within the schedule. This schedule will require a “GAP YEAR” between graduation from Hope College and entrance into medical school the following year.

BIOL 221 must be taken before taking KIN 321. KIN 150 should be taken as early as possible and before KIN 321. MATH 115 must be completed before taking KIN 310. KIN 200 must be taken before KIN 300, and KIN 300 must be taken before KIN 383. Additionally, KIN 321 must be completed before taking KIN 421. KIN 321, 310, CHEM Pre-req., and MATH 115 must be completed before taking KIN 422.

The following sequence of courses serves as a **suggestion** only and variances may occur. Many medical schools may have different pre-requisites; therefore, you should see the health professions advisor **AND** an exercise science advisor as soon as possible. In addition, you should check required courses for medical schools to which you plan to apply.

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR
FALL	FALL	FALL	FALL
CHEM 125/127 General Chemistry I & Lab  *BIO 105 – General Biology I and Lab (or Sophomore year)  *PSY 100 – Intro to Psychology  KIN 150 – Intro to Writing in Exercise Science	BIOL 221/221L – Human Physiology & Lab  *CHEM 221/255 – Organic Chemistry and Lab  *SOC 101 – Intro to Sociology  MATH 115 – Intro to Statistics	*CHEM 311 – Biochemistry I  KIN 300/300L – Anatomical Kinesiology & Lab  KIN 421/421L – Clinical Exercise Physiology & Lab (either semester)	*PHYS 121/ 141 - General Physics I  *BIO – Upper Level Course  KIN 499 – Special Studies OR KIN 299 – Internships
SPRING	SPRING	SPRING	SPRING
*CHEM 126 & 128 – General Chemistry II & Lab OR CHEM 131/132 – Accelerated General Chemistry & Lab  *BIO 106/108 – General Biology II and Lab (or Sophomore year)  KIN 200/200L - Human Anatomy & Lab (or Sophomore year)  KIN 150 – Intro to Writing in Exercise Science (if not previously taken)	*CHEM 231 & 256 – Organic Chemistry and Lab  KIN 310/310L – Research Methods & Lab  KIN 321/321L – Exercise Physiology & Lab (or Junior Year before Kin 421/421L)  KIN 208 – Intro to Nutrition (May Term)	KIN 383/383L – Biomechanics & Lab  *BIO – Upper Level Course	*PHYS 122 /142 – General Physics II  KIN 422/422L – Regulation of Human Metabolism & Lab

\*Courses NOT required for exercise science major, but required for most/many Medical programs.

NOTE: In order to meet graduation and pre-admission requirements, some courses may need to be taken in the summer. The 4yr to MCAT will require a gap year.

## EXERCISE SCIENCE MAJOR PRE-MED SEQUENCE – 4yr to MCAT

### REQUIRED COURSES:

		<u>Credits</u>	<u>Sem</u>	<u>Prerequisites</u>
KIN 150	Introduction to Writing in Exercise Science	1	F/S	
KIN 200/200L	Human Anatomy (BIO 222)	3+1	F/S	
KIN 208	Introduction to Nutrition	3	F/S	
KIN 300/300L	Anatomical Kinesiology	3+.50	F	KIN 200/200L
KIN 310/310L	Research Methods in Kinesiology	3+1	F/S	MATH 115
KIN 321/321L	Exercise Physiology & Lab	3+1	F/S	BIO 221
KIN 421/421L	Clinical Exercise Physiology & Lab	3+1	F/S	KIN 321/321L; BIO 221
KIN 383/383L	Biomechanics	3+.50	S	KIN 200/200L; KIN 300/300L
KIN 422/422L	Regulation of Human Metabolism	3+1	F/S	KIN 310/310L; KIN 321/321L, and CHEM Pre-req.
KIN 499	Special Studies in Exercise Science	3	F/S	KIN 310/310L
OR				
KIN 299	Internships	3	F/S/Summer	

### REQUIRED CORE COURSES:

CHEM 125/127	General Chemistry I and Lab	3+1	F	Written permission from instructor(lab)
BIOL 221/221L	Human Physiology & Laboratory	3+1	F	
MATH 115	Introductory Statistics	3	F/S	

### REQUIRED BY MOST MED SCHOOLS: (not required for exercise science major)

BIO 105/107	General Biology I and Lab	3+1	F	
BIO 106/108	General Biology II and Lab	3+1	S	
BIO	Upper Level Course	3	S	
BIO	Upper Level Course	3	F	
CHEM 126/128	General Chemistry II and Lab	3+1	F	C- or better in CHEM 125
OR				
CHEM 131/132	Accelerated General Chemistry and Lab	3+1	F	Written permission from instructor
CHEM 221/255	Organic Chemistry I and Lab	See catalog	F	See catalog
CHEM 231/256	Organic Chemistry II and Lab	See catalog	S	Chem 221 with a C- or better.
CHEM 311	Biochemistry I	3	F	Chem 231 with a C- or better.
MATH 131	Calculus I	3	F/S	
PSY 100	Introduction to Psychology	3	F/S	
SOC 101	Introduction to Sociology	3	F/S	
PHYS 121/141	General Physics I and Lab	3+1	F/S	See catalog
PHYS 122/142	General Physics II and Lab	3+1	F/S	See catalog

\*\* Many medical schools require an upper level English class.