

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 prior to KIN 222 & 223. KIN 202 should be taken as early as possible. MATH 210 *must* be taken before KIN 250. Kin 200 *must* be taken prior to Kin 221, and Kin 221 *must* be taken before Kin 383. Additionally, KIN 222 & 223 *must* be taken before KIN 323. KIN 222, 223, 250, CHEM 125/127, and MATH 210 *must* be taken prior to 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 pre-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 OR CHEM 131/132 – Accelerated General Chemistry *BIO 105 & 107 – General Biology I and Lab (or Sophomore year) *PSY 100 – Intro to Psychology	BIOL 221 – Human Physiology *CHEM 221 & 255 – Organic Chemistry and Lab *SOC 101 – Sociology and Social Problems MATH 210 – Intro to Statistics	*CHEM 311 – Biochemistry I KIN 221–Anatomical Kinesiology KIN 323/324 – 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 *BIO 106 & 108 – General Biology II and Lab (or Sophomore year) KIN 200 - Human Anatomy & Lab (or Sophomore year) KIN 202 – Intro to Writing in Exercise Science (or Sophomore year)	*CHEM 231 & 256 – Organic Chemistry and Lab **KIN 250 – Research Methods KIN 222 & 223 – Exercise Physiology & Lab or Junior Year before Kin 323 / 324 KIN 208 – Intro to Nutrition (May Term)	KIN 383 – Biomechanics *BIO – Upper Level Course	*PHYS 122 & 142 – General Physics II KIN 422 – Regulation of Human Metabolism

*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 200	Human Anatomy (BIO 222)	4	S	
KIN 202	Introduction to Writing in Exercise Science	1	F/S	
KIN 208	Introduction to Nutrition	3	F/S	
KIN 221	Anatomical Kinesiology	4	F	KIN 200
KIN 222	Exercise Physiology	3	F/S	BIO 221
KIN 223	Exercise Physiology Laboratory	1	F/S	BIO 221
KIN 250	Research Methods in Kinesiology	4	F/S	MATH 210
KIN 323	Clinical Exercise Physiology Lecture	3	F/S	KIN 222 & 223; BIO 221
KIN 324	Clinical Exercise Physiology Lab	1	F/S	KIN 222 & 223; BIO 221
KIN 383	Biomechanics	4	S	KIN 200, KIN 221
KIN 422	Regulation of Human Metabolism Req.	4	F/S	KIN 222& 223, 250, & CHEM Pre-
KIN 499	Special Studies in Exercise Science	3	F/S	KIN 250
OR				
KIN 299	Internships	3	F/S/May	

REQUIRED CORE COURSES:

CHEM 125/127	General Chemistry I & Lab	4	F
BIOL 221	Human Physiology & Laboratory	4	F
MATH 210	Introductory Statistics	4	F/S

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

BIO 105/107	General Biology I and Lab	4	F
BIO 106/108	General Biology II and Lab	4	S
BIO	Upper Level Course	3	S
BIO	Upper Level Course	4	F
CHEM 125/127	General Chemistry I and Lab	4	F
&			
CHEM 126/128	General Chemistry II and Lab	4	F
OR			
CHEM 131/132	Accelerated General Chemistry and Lab	(8)	F
CHEM 221/255	Organic Chemistry I and Lab	5	F
CHEM 231/256	Organic Chemistry II and Lab	4	S
MATH 131	Calculus I	4	F/S (Must be taken before PSY 121)
PSY 100	Introduction to Psychology	4	F/S
SOC 101	Sociology and Social Problems	4	F/S
PSY 121/141	General Physics I and Lab	4	F/S
PSY 122/142	General Physics II and Lab	4	F/S

** Many medical schools require an upper level English class. We recommend that you take a Cultural Heritage I or II course with a literature focus.

The Kinesiology elective course is waived for students who are majoring in Exercise Science and on the Pre-Med Sequence. A substitution form must be completed and returned to the Registrar's Office for this Major substitution to show up on your degree evaluation.