

**DEPARTMENT OF KINESIOLOGY**

**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.

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| 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:** Credits Sem Prerequisites

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.