

Exercise Science (BS), Pre-Medical Sciences Concentration

This sample academic plan has been developed by the Exercise Science faculty and reviewed by Truman's Pre-Med Committee. The listed courses fulfill the Exercise Science (BS) (Pre-Medical Science concentration) degree requirements, which incorporates prerequisites required by most medical schools. For a list of suggested pre-medical prerequisite courses, click [here](#).

Semester 1

- **ES 190: WE/Introduction to Exercise Science** (3 cr)
- TRU 120: First Year Seminar (3 cr)
- BIOL 107: Cells, Molecules, and Genes (4 cr)
- Math 186: Pre-Calculus (4 cr)
- HIST 1104: United States History I (3 cr) **OR** HIST 1105: United States History II (3 cr)

Semester 2

- **ES 224: Research Methods & Data Interpretation** (3 cr)
- **ES 202: Strength & Conditioning Anatomy** (1 cr)
- CHEM 131 Chemical Principles II (4 cr)
- Art & Humanities- English (3 cr)
- Elementary Foreign Language I (3 cr)

Semester 3

- **ES 245: Nutrition for Health, Fitness, and Sport** (3 cr)
- CHEM 130: Chemical Principles I (4 cr)
- COMM 170: Public Speaking (3 cr)
- ENG 190: Writing as Critical (3 cr)
- STAT 190: Basic Statistics (3 cr)

Semester 4

- **ES 345: Exercise Physiology** (3 cr)
- CHEM 329: Organic Chemistry I (^) (3 cr)
- BIOL 104: Ecology & Evolution of the Organism (4 cr)
- PSYC 166: General Psychology (3 cr)
- Elementary Foreign Language II (3 cr)

Semester 5

- **ES 344: Lifespan Motor Development** (3 cr) **OR** **ES 347: Motor Learning with Lab** (3 cr)
- BIOL 365: Human Anatomy (3 cr)
- BIOL 365L: Human Anatomy Lab (1 cr)
- CHEM 330: Organic Chemistry I Lab (^) (1 cr)
- CHEM 333: Organic Chemistry Lab (^) (2 cr)
- PHYS 185: College Physics I (4 cr)
- JINS 3XX: WE/Junior Interdisciplinary Seminar (3 cr)

Semester 6

- **ES 342: Biomechanics with Lab** (4 cr)
- **ES 445: Assessment & Prescription** (3 cr)
- **ES 445L: Assessment & Prescription Lab** (1 cr)
- **ES 250: Exercise Science Practicum I** (*) (1 cr)
- ES Core Elective (3 cr)
- Dialogues Curriculum course (3 cr)

Semester 7

- **ES 498: WE/Capstone in Exercise Science** (3 cr)
- **ES Core Elective** (3 cr)
- Dialogues Curriculum courses (9 cr)
- **Take Senior Test-ACSM EP-C**

Semester 8

- **ES 498: WE/Capstone in Exercise Science** (3 cr)
- **ES Core Elective** (3 cr)
- Dialogues Curriculum courses (9 cr)
- **Take Senior Test-ACSM EP-C**

NOTES:

- ES 342/L, ES 345 and ES 347 - prerequisite is STAT 190 (or calculus) **and** ES 224
- (*) = ES 250 is offered fall, winter interim, spring and summer
- (**) = Check if have achieved > 40 hrs upper level
- (***) = Check if Dialogues requirements have been met, civics exam complete
- (****) = Recommend getting intercultural requirement as part of other courses
- (^) = Only if planning to be physician or physician assistant- CHEM 335 recommended if room
- See course pre-requisites at catalog.truman.edu. For additional information visit www.truman.edu/majors-programs/health-and-exercise-science-program/
- You are encouraged to use these materials in conjunction with the Truman Catalog and Degree Works (available on TruView) as a guide in planning your progress toward completion of degree

requirements. The Office of the Registrar is responsible for certifying completion of degree requirements based on requirements specified in the catalog.

- WE = Writing Enhanced course
- If you have not completed the Civics Exam, we recommend doing so in your **first year**.
- Truman students are required to complete a [Portfolio](#) to graduate. We recommend starting to compile your work for the Portfolio sooner than later.
- Students must complete their Application to Graduate **the semester prior to graduating**. Apply to graduate through TruView.
- Graduating seniors need to complete their seniors test and questionnaire. We recommend reviewing the [Assessment & Testing page](#) to plan accordingly.
- **The Dialogues curriculum** requires a certain number of courses/credit hours in the following Perspectives: Social, Arts and Humanities, STEM, Communications, and Statistics. The exact number of courses a student will be required to take during their undergraduate career varies individually according to the credit transferred in.

Department chair: Please contact the Center for Academic Excellence with any updates to the plan above. Revised 10-4-2025.