## SCIENCE PATHWAYS, CHART A: The <u>typical</u> student at TUSD's West Area middle schools and high school can consider one of the following science pathways, with concurrent math classes as shown. *(21/22)*

Direction of interest	9th	10th	11th	12th
Concurrent math course	Algebra 1	Geometry (regular or Honors)	Algebra 2 (regular or Honors)	Precalculus (regular or Honors) or Trigonometry
Life science/ Integrative biology	Biology (Biology Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Choice of elective: *Anatomy/Physiology *Anatomy/Physiology H *AP Biology *AP Chemistry *Physics (concurrent Alg 2 required; precalc recommended)	Choice of elective:  *AP Biology  *AP Chemistry  *Astrobiology  *AP Environmental Science  *Physics (concurrent Alg 2 required; precalc recommended)  *EMR and Health Careers***  (prerequisite- Anatomy/Phys or H)
Biomedical careers	Biology (Biology Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Choice of elective:  *AP Biology  *AP Chemistry  *Anatomy/Physiology  *Anatomy/Physiology H  OR  *Physics (concurrent Alg 2 required; precalc recommended)	*Physics (concurrent Alg 2 required; precalc recommended) OR Choice of elective: *AP Biology *AP Chemistry *Anatomy/Physiology *EMR & Health Careers*** (prerequisite- Anatomy/Phys or H)
Physical science	Biology (Biology Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Choice of elective: *AP Chemistry *Astrobiology *AP Environmental Science *Physics (concurrent Alg 2 required; precalc recommended)	Choice of elective:  *AP Chemistry  *Physics (concurrent in precalc)  *Astrobiology  *AP Environmental Science
Environmental Science	Biology (Biology Honors with approval and completion of readiness requirements)	Earth Science	Chemistry (Chemistry Honors with approval and completion of readiness requirements)	AP Environmental Science
Non-science college/career path	Biology (Biology Honors with approval and completion of readiness requirements)	Earth Science or Chemistry	Earth Science, Chemistry, , Anatomy/Physiology or choice of another 3rd year science course, if desired	Choice of additional year of science, if desired
Engineering Concurrent CTE courses: **see clarification below	Biology (Biology Honors with approval and completion of readiness requirements) AND Introduction to Engineering Design	Chemistry (Chemistry Honors with approval and completion of readiness requirements) AND Principles of Engineering	Physics AND Computer Science AP**see below for pathway completion	Choice of elective: *AP Chemistry *Astrobiology *AP Physics AND Engineering Design and Development

<sup>\*\*</sup>The Project Lead the Way engineering pathway is offered through the WHS Career Technical Education Department. The pathway consists of Introduction to Engineering Design, Principles of Engineering, an optional engineering specialty course, then EDD. At West High School, the computer science course acts as the third year specialty course.

<sup>\*\*\*</sup> Emergency Medical Responder (EMR) and Health Careers is a new pathway offered through the Science and WHS Career Technical Education Department. Prerequisites- Biology and Anatomy/Phys H; chemistry strongly encouraged.

SCIENCE PATHWAYS, CHART B: The <u>accelerated</u> student at TUSD's West Area middle schools and high school can consider one of the following science pathways, with concurrent math classes as shown.

For concurrent Engineering or Emergency Medical Responder/Health Careers pathways, see Chart A. (21/22)

Direction of interest	8th	9th	10th	11th	12th
Concurrent math course	Algebra 1	Geometry (regular or Honors)	Algebra 2 (regular or Honors)	Precalculus (regular or Honors)	Calculus
Life science/ Integrative biology	OR Biology Honors (with approval and completion of readiness requirements)	Biology (Biology Honors with approval and completion of readiness requirements) OR Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements) OR Choice of elective: *Anatomy *AP Biology *AP Chemistry	Choice of elective: *Anatomy *AP Biology *AP Chemistry *Physics (concurrent Alg 2 required; precalculus recommended)	Choice of elective: *AP Biology *AP Chemistry *Astrobiology *AP Environmental Science *Physics (concurrent Alg 2 required; precalculus recommended)
Biomedical careers	OR Biology Honors (with approval and completion of readiness requirements)	Biology (Biology Honors with approval and completion of readiness requirements) OR Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements) OR Choice of elective: *Anatomy *AP Biology *AP Chemistry	Physics (concurrent Alg 2 required; precalculus recommended)	Choice of elective: *AP Biology *AP Chemistry *Anatomy *: EMR & Health Careers*** (prerequisite - Anatomy/Phys or H)
Physical science	OR Biology Honors (with approval and completion of readiness requirements)	Biology (Biology Honors with approval and completion of readiness requirements) OR Chemistry (Chemistry Honors with approval and completion of readiness requirements)	Chemistry (Chemistry Honors with approval and completion of readiness requirements) OR *AP Chemistry	*Physics (concurrent Alg 2 required; precalculus recommended)	Choice of elective: *Astrobiology *AP Physics (concurrent in precalculus)
Environment al Science	OR Biology Honors with approval and completion of readiness requirements)	Biology (Biology Honors with approval and completion of readiness requirements) OR Chemistry OR Earth Science	Chemistry OR Earth Science	AP Environmental Science OR Choice of elective	AP Environmental Science OR Choice of elective
Engineering	See Chart A.				