

Science Sequencing for High School Courses

*The law requires Michigan students to take **Biology**, and **Chemistry** **OR** **Physics** and one other approved science course. No sequence is suggested/mandated by the state. Students must earn 3 credits in science with a **STRONG** recommendation given for 4. The MME in science will test students on the essential expectations from Earth science, physics, chemistry and biology. This test is administered in March of 11th grade. Prerequisites will be phased out of the high school curriculum and be moved to the elementary (K-7) curriculum that was approved on December 11, 2007. The State has broken each science discipline up into 12 modules. Class decisions and sequencing will be based on Saginaw Public School Career Pathways.

Grade	Class Name	Content Covered	Test/Credit Given
8 th	Earth Science	Earth Science Prerequisite Expectations (all until phased out) Earth Science Essential Expectations (all) Earth Science Core Expectations (all)	Testlets given after each section is covered and applied toward high school graduation requirements. Earth science credit earned if all testlets are passed.
9 th	Biology	Biology Prerequisite Expectations (all until phased out) Biology Essential Expectations (all) Biology Core Expectations (all)	Testlets given after each section is covered in biology. Biology credit earned if all testlets are passed.
10 th <small>(Sequencing decision based on Career pathway)</small>	<i>Chemistry</i>	Chemistry Prerequisite Expectations (all until phased out) Chemistry – Essential Expectations (all) Chemistry – Core Expectations (all)	Testlets given after each section is covered in chemistry. Chemistry credit earned if all testlets are passed.
	<i>Physics</i>	Physics Prerequisite Expectations (all until phased out) Physics – Essential Expectations (all) Physics – Core Expectations (all)	Testlets given after each section is covered in physics. Physics credit earned if all testlets are passed.
	Physical Science	Chemistry Prerequisite Expectations (all until phased out) Chemistry Essential Expectations (all) Physics Prerequisite Expectations (all until phased out) Physics Essential Expectations (all)	Testlets given after each section is covered. Physical Science credit earned (counts as 3rd science credit) if all testlets are passed.
11 th	Chemistry, Physics or Physical Science (only apply to a few Career Pathway sequences)	See 10 th grade year for specifics	See 10 th grade year for specifics
12 th <small>(Sequencing decision based on Career pathway)</small>	<u>Elective Science Courses:</u> <ul style="list-style-type: none"> • Physics • Chemistry • Earth Science • Environmental Science • Forensics • Anatomy/Physiology • Microbiology • Botany • Zoology • Astronomy • Geology • AP Biology • AP Chemistry • AP Physics 	Necessary Expectations taught for designed class as defined by MDE for “other approved science credit”.	MME Test given in March (students are tested on Essential Expectations from Earth Science, Chemistry, Physics and Biology which will have all been covered in time with this sequence)