Mi-STAR Model Course Progression (Grades 6-8)
With NGSS Performance Expectations (PEs) and Unifying Crosscutting Concepts (UCCC)

Mi-STAR is made possible by a grant from the Herbert H. and Grace A. Dow Foundation.
Neither Achieve nor the NGSS lead states and partners were involved in the production of this product.

Grade	1st Semester Units				2nd Semester Units			
UCCC	Systems and system models				Patterns / Cause and effect			
6	**6.1+ Protecting our community's water through land use planning** MS-ESS2-4 MS-PS1-4 MS-ETS1-1 W	**6.2 How living things get energy for food** MS-LS1-7 MS-PS1-2 MS-PS1-5 MS-PS1-6 F	**6.3 Modeling healthy body systems** MS-LS1-1 MS-LS1-2 MS-LS1-3 P	**6.4 Understanding forces and motion through transportation** MS-PS2-1 MS-PS2-2 B	**6.5 What plants need to grow** MS-LS1-5 MS-LS2-1 MS-ESS3-1* (ESS3.A) F	**6.6+ Managing invasive species to protect ecosystem interactions** MS-LS2-1* (LS2.A) MS-LS2-2 MS-LS2-4 ETS1-2* (ETS1.B) S	**6.7 Cycling of energy through food webs** MS-LS1-6 MS-LS2-3 S	
UCCC	Energy and matter				Structure and function			
7	**7.1+ Generating electricity** MS-PS2-3 MS-PS3-1 MS-PS3-2 MS-PS3-5 EE	**7.2 Cycling and use of minerals** MS-ESS2-1 MS-ESS2-2 MS-ESS2-3* (ESS2.B) MS-PS1-1* (PS1.A) ES	**7.3+ Selecting sustainable building materials by modeling their life cycle** MS-PS1-3 MS-ESS3-1 MS-ESS3-4* (ESS3.C) MS-PS3-3* (PS3.A,B) EE	**7.4 Designing a device to regulate thermal energy transfer** MS-PS3-3 MS-PS3-4 MS-ETS1-4 B	**7.5 How humans affect plant/animal reproduction** MS-LS1-4 MS-ESS3-3 S	**7.6 Genetics and agriculture** MS-LS1-5* (LS1.B) MS-LS3-1 MS-LS3-2 MS-LS4-5 F	**7.7 Water chemistry and quality** MS-PS1-1 MS-ESS2-2* (ESS2.C) MS-ESS3-1* (ESS3.A) P	**7.8 Maintaining ecosystem services** MS-LS2-5 MS-ETS1-2 MS-ETS1-3 W
UCCC	Scale, proportion, and quantity				Stability and change			
8	**8.1 Natural selection and antibiotics** MS-LS3-1* (LS3.B) MS-LS4-4 MS-LS4-6 P	**8.2 History of life on earth** MS-LS4-1 MS-LS4-2 MS-LS4-3 MS-ESS1-4 S	**8.3 Sound and light waves in communication** MS-PS2-5 MS-PS4-1 MS-PS4-2 MS-PS$-3 MS-LS1-8 B	**8.4 Solar system, forces, and seasons** MS-ESS1-1* (ESS1.A) MS-ESS1-2 MS-ESS1-3 MS-PS2-4 ES	**8.5 Weather, climate, and Michigan agriculture** MS-ESS1-1 MS-ESS2-5 MS-ESS2-6 F	**8.6+ Predicting natural hazards and reducing their impacts** MS-ESS3-2 MS-ESS2-3 P	**8.7+ Investigating and addressing climate change** MS-ESS3-4 MS-ESS3-5 W	

Key: *Each unit addresses a theme, as indicated by the following color/letter coding:*

Built Environment B	*Public Health* P	*Food & Agriculture* F	*Water Resources* W	*Sustainable Ecosystems* S	*Earth & Space Systems* ES	*Earth & Energy Resources* EE

+Indicates units that will be available Fall 2017. For all other units, the unit topic is subject to revision based on the creative design of curriculum design teams.
*Where a specific DCI is noted in parentheses following a PE, only the DCI is primary in the package. The CCC, SEP, or other DCIs associated with the PE are not primary
Note: PEs, concepts, and practices indicated here are thoroughly addressed in the unit. Each unit also addresses supporting concepts and practices that allow for scaffolded learning over time.

 Last updated May 2017.