

Secondary II Curriculum Guides

Students graduating from Utah high schools must be mathematically prepared to thrive in today's high-tech, complex, and competitive world. The Utah State Board of Education has adopted the Utah Core State Standards (UCSS) and selected the international organization of these standards as the framework for the Utah Mathematics Curriculum. The Secondary II Curriculum Guides are provided to teachers to illuminate the meaning of the standards and to provide instructional guidance.

Each page of the curriculum guides elaborates on one standard of the Secondary II curriculum. Standard curriculum guides are grouped in clusters to better illustrate reasonable groupings and suggest trajectories for learning mathematics. Clusters are likewise organized into units with a common theme such as algebra or geometry. The units of the common core are not suggested as units of study for students. Teachers must select and group clusters of standards to form reasonable units for instructional purposes.

Core Content

Each guide is organized in two tables. The Core Content table describes what students must understand and be able to do in mathematics. This portion of the guide corresponds directly to the standards of the CCSS and may not be modified.

- **Cluster Title:** This statement will help teachers group standards into instructional units.
- **Standard:** The statement of the standard is verbatim from the CCSS with the exception of some of the honors standards. It is coded to the domains and clusters in the CCSS. Statements that appear crossed out will appear in other levels of the common core and are not to be taught in Secondary II.
- **Concepts and Skills to Master:** This section states in more detail what is expected of students. It describes what students must know and be able to do in order to demonstrate mastery of a standard.

Supports for Teachers

The Supports for Teachers table provides suggestions on critical background, academic vocabulary, suggested instructional strategies, resources, and sample formative assessment tasks. This table contains suggestions which should be viewed as optional components that can be modified to help all students reach learning goals..

- **Critical Background Knowledge:** This section describes skills and understanding students must have before being ready to access the standard. These skills and understandings may have been developed in a previous course, but this should not be assumed. Teachers should employ pre-assessments to determine student readiness for deep study of a standard.

- Academic Vocabulary: These are words that teachers and students are expected to use and understand.
- Suggested Instructional Strategies: These strategies may include mathematical tasks, exploration, or application of content. Teachers should not limit themselves to the strategies given, but rather use the strategies to inspire lesson design.
- Resources: There are currently limited resources for Common Core Implementation; however, some resources have been provided. Local education agencies and teachers will want to augment this section with maps to their adopted curricular materials and additional instructional materials.
- Skill-based Task: The skill based task is a traditional measure of student skill or demonstrated understanding of the standard. It is an example only and may not cover the breadth or depth of the standard.
- Problem Task: The problem task is designed to stretch student thinking. The task may be non-traditional or application based, but will almost always require critical thinking. Teachers may use these tasks to introduce standards or assess student understanding at a deeper level than is possible with a skill-based task.

Honors Guides

Several standards have been designated as honors standards. These standards provide critical mathematics for students who will complete the honors pathway in preparation for Calculus in the senior year. In Secondary II the honors focus is on building an understanding of complex numbers and basic trigonometry while also working with applications of matrices..

Use of the Curriculum Guides

The Curriculum Guides should be read in concert with the CCSS documents found at www.corestandards.org. These documents will help familiarize teachers with the intent of the original standards writers and are an essential part of preparation for teaching the Common Core as contained in the Utah Curriculum Guides.