

# Course SLOs aligned with Program SLOs

## San Mateo CCCD

### CAN Institutional SLOs

**Select, evaluate, and use information to investigate a point of view, support a conclusion, or engage in problem solving.**

#### **CAN Dept - Astronomy**

CAN ASTR 101 - Astronomy Laboratory

##### *Course Outcomes:*

- \* Data - Students will be able to accurately collect and analyze scientific data (Created By CAN Dept - Astronomy)
- \* Solar System - Students will demonstrate an understanding of the size and scale of the solar system (Created By CAN Dept - Astronomy)
- \* Temperature and Spectra - Students will be able to identify changes in source temperature based on spectral shifts (Created By CAN Dept - Astronomy)

**Produce, combine, or synthesize ideas in creative ways within or across disciplines.**

No Course Outcomes related to this ISLO.

**Use language to effectively convey an idea or a set of facts, including the accurate use of source material and evidence according to institutional and discipline standards.**

#### **CAN Dept - Astronomy**

CAN ASTR 101 - Astronomy Laboratory

##### *Course Outcomes:*

- \* Communication and Reporting - Demonstrate scientific communication skills through clear, well-organized laboratory and project reports, as well as oral presentations (Created By CAN Dept - Astronomy)

**Understand and interpret various points of view that emerge from a diverse world of peoples and cultures.**

No Course Outcomes related to this ISLO.

**Represent complex data in various mathematical forms (e.g., equations, graphs, diagrams, tables, and words) and analyze these data to draw appropriate conclusions.**

#### **CAN Dept - Astronomy**

CAN ASTR 100 - Introduction To Astronomy

##### *Course Outcomes:*

- \* Data Collection and Reporting - Demonstrate their astronomical skills and use of measurement tools through systematic collection, analysis, and reporting of data of solar elevation angle and length of daylight in a semester long project regarding the cause of the seasons (Created By CAN Dept - Astronomy)
- \* Observational Evidence - Demonstrate their understanding of the scientific process by describing how astronomical observations are used to support scientific theories (Created By CAN Dept - Astronomy)
- \* Planetary Characteristics - Identify and describe the formation and characteristics of the planets, the properties and evolution of stars, and the structure of the Milky Way galaxy (Created By CAN Dept - Astronomy)
- \* Stars - Students will be able to correctly identify different classes of stars based their position in an HR diagram and accurately describe the appropriate life-cycle stage of each type of star. (Created By CAN Dept - Astronomy)

CAN ASTR 101 - Astronomy Laboratory

##### *Course Outcomes:*

- \* Data - Students will be able to accurately collect and analyze scientific data (Created By CAN Dept - Astronomy)
- \* Models of astronomical concepts - Construct and analyze models, simulations, and other representations of astronomical concepts (Created By CAN Dept - Astronomy)
- \* Solar System - Students will demonstrate an understanding of the size and scale of the solar system (Created By CAN Dept - Astronomy)
- \* Temperature and Spectra - Students will be able to identify changes in source temperature based on spectral shifts (Created By CAN Dept - Astronomy)