

with Nebraska Math and Science Summer Institutes

## **ASTR 898: Phenomena of Planetary Satellites**

## WEB CONFERENCING (SYNCHRONOUS)

Dates: June 21-July 2, Monday-Friday

Zoom times: 10am-noon

and 1-3pm

Primary Audience: Grades 7-12 Teachers

Credit Hours: 3

Class #: 9980, Sec. 596

Email Kelcey for a permission code: kgabriel2@unl.edu

**Prerequisites:** A valid secondary or upper primary science teaching certificate in either Earth & Space Science or Physical Science or permission.

**Description:** This course will survey phenomena related to moons in our solar system. Although Earth's moon will receive the largest focus, we will also explore the moons of other planets in our solar system. The phenomena to be explored include phases; eclipses; tides and tidal heating; orbital dynamic processes such as circularization of an orbit and synchronous rotation; and resonance with other objects. We will also explore sufficient planetary geology to discuss interesting characteristics of the moons. Special attention will be given to the 2017 eclipse and what was learned related to instructional pedagogy as well as informal science. We will use the lessons learned to plan similar efforts related to the upcoming eclipse of April 2024.

Instructor: Dr. Kevin M. Lee, Physics and Astronomy, UNL, klee6@unl.edu

Apply for fellowships and review the course catalog at: scimath.unl.edu/NMSSI



## **UNL Center for Science, Mathematics & Computer Education**

NMSSI is supported by: UNL College of Arts & Sciences, College of Education & Human Sciences and the College of Agricultural Sciences & Natural Resources

ADVANTAGES FOR TEACHERS: Current Nebraska teachers qualify for a 20 percent discount on in-state tuition at UNL Teachers can apply for a supplemental tuition fellowship from the NMSSI