

Astrophotography Expedition

Grades 8-12

July 6 (6 pm) – July 9 (3 pm)

In this overnight camp, students will learn about various astrophotography techniques that are used to image different types of deep-sky objects such as star clusters, nebula, and galaxies. They will learn about those deep sky objects' origins, classifications, morphology, and evolution, and will learn about and perform traditional and digital astrophotography. They also will have the



opportunity to use Kopernik's new state-of-the-art CCD camera. Daytime hours will be filled with interactive lectures and hands-on labs with Kopernik educators and guest speakers. In the evenings, students will do astrophotography and gain hands-on experience with Kopernik's photographic equipment. If skies are cloudy, students will do related activities including image processing and will work on team projects.

Wednesday	PROGRAM INTRODUCTION
	DSLR CAMERA AND TELESCOPE ORIENTATION
Thursday	DEEP SKY OBJECTS
	GALAXY MORPHOLOGY AND PALOMAR PLATES
	CCD CAMERAS, FILTERS, AND IMAGE PROCESSING
	IF CLEAR, OBSERVING AND CAPTURING IMAGES
Friday	OFF CAMPUS ACTIVITY
	IMAGE PROCESSING
	IF CLEAR, OBSERVING AND CAPTURING IMAGES
Saturday	PROJECT WORK
	PROJECT PRESENTATIONS