Observing Planets Project

University of Notre Dame

Name _____

Date _____

Time _____

Eyepiece Focal Length used _____

TA Signature _____

The key to observing with a small telescope is patience. The atmosphere will quiet down for short periods which can provide moments of great "seeing". Also the telescope can vibrate and it is best to let it settle down (and not to touch the telescope while viewing). Note the focal length of the eyepiece you are using. Shorter focal lengths mean higher magnification.

The first exercise is intended to illustrate to you the difference between naked eye observations and observing through a telescope. You should first print the September star map from the "online star maps" link on the course website.

1) **With your unaided eye, find the star "Albireo" at the head of Cygnus the Swan.** (A TA can help) Below, note its color compared to other bright stars.

2) **Look at Albireo through one of the 8" telescopes at the observatory**. Describe what you see.

The next exercise replicates Galileos observation that there were moons that orbited around Jupiter.

3) **Draw Jupiter as seen through an 8" telescope.** Look carefully for any markings or features on Jupiter. Note the positions of the four brightest moons of Jupiter. Use the computer at the observatory to label your drawing with the names of the moons.

Optional (not graded): 1. Observe Uranus (TA will help you locate Uranus)

2. Return to the observatory a few days later and observe the moons of Jupiter - compare their positions to your first observation.