

OBSERVATIONAL OPTICAL ASTRONOMY

PH 344 FALL 2011

Instructors: Dr. Tad Pryor

302 Physics & Astronomy Building, Busch Campus

732-445-5500 x5462 pryor@physics.rutgers.edu

Office Hour: Thursday 1:30 - 3:00 PM (or make an appointment)

Philip Naudus

220 Allison Road Classroom Bldg (ARC), Busch Campus

pnaudus@rutgers.edu

Text: *Observational Astronomy, 2nd Edition* by Birney, Gonzalez, & Oesper, Cambridge University Press. Texts are available at the Rutgers Bookstores or on-line through <http://rutgers.bncollege.com/>.

Course Homepage: <http://www.physics.rutgers.edu/ugrad/344/ph344home.html>

Important information about the course and useful links to astronomy websites will be posted here, so check it regularly.

Overview: This course provides an introduction to the tools and techniques of modern optical observational astronomy. We will use the 20-inch optical telescope of the Schommer Observatory to carry out astronomical imaging and spectroscopic observations, and analyze these observations using professional image-processing software. This course is designed to accompany and complement the lecture courses Ph 341-342 *Principles of Astrophysics*. One year of introductory physics is a prerequisite for this course. Students who are not taking Ph 341-342 may enroll in *Observational Optical Astronomy*, but should be prepared to devote additional studies to understand the astronomical background of the observations performed here.

Lectures: Thursday 6:40-8:00 PM, Rm 401 Serin Physics Lab, Busch Campus.

Labs: You will select a weekly time period for performing your observations. Makeup times for bad weather will be available. Some labs may require multiple observations. You should have a small flashlight for observing.

Assignments: Observations will be assigned approximately every two weeks, and written reports will be due by dates noted on the assignments. Due dates may be postponed if unusually bad weather intervenes. Observing reports not turned in on time will receive the following penalties: up to 1 week late, 33% reduction; between 1 and 2 weeks late, 66% reduction; no reports will be accepted more than 2 weeks late.

Grades: Your course grade will be based on your observation reports and your participation in class and lab. There will be no examinations in this course.

Students with Disabilities: Students with disabilities should refer to the information found at: <http://www.physics.rutgers.edu/ugrad/disabilities.html>