

Astronomy 201

Project #1: Viewing the Winter Sky

Duration: January - March
Completion Date: by March 27, 2012

The following lab is intended to give you experience in:

- identifying winter constellations
- identifying major stars in the winter sky
- telescopic observation of prominent winter sky objects

Part One: Major Constellations and Stars

Use the constellation charts which appear in the back of your text or any other convenient set of charts. Be sure that you can identify the following constellations and stars:

Auriga	Capella	Perseus	Regulus	Spica
Gemini	Castor	Coma Bernices	Pollux	Sirius
Canis Major	Canis Minor	Taurus	Aldebaran	Leo
Virgo	Procyon			

Problem #1

Sort the above objects into either stars or constellations. If they are stars do the following:

- look up their spectral type and predict the color they will appear. Record this in a convenient table. Next, observe them and note their color. Are some spectral types more easily seen as colored than others?

Part Two: Winter Nebulae and Clusters

For this part of the project should observe the following objects:

- Open Clusters M35, M37, M38, M44, M67,
- Nebulae M1, M42, M97,

Observing Tips: If possible bring a chair, and simple sketching materials. A dark hood to block out extraneous light is very useful. Also, try to observe the objects at different magnifications and practice looking for extended periods of time - typically 10 seconds or more.

Problem #2

Prepare sketches of the objects using the sketching template provided. Note any conspicuous features. **Always do your sketches in pencil!**

Note: always include the following in your drawings:

- Exact date/time
- Object name

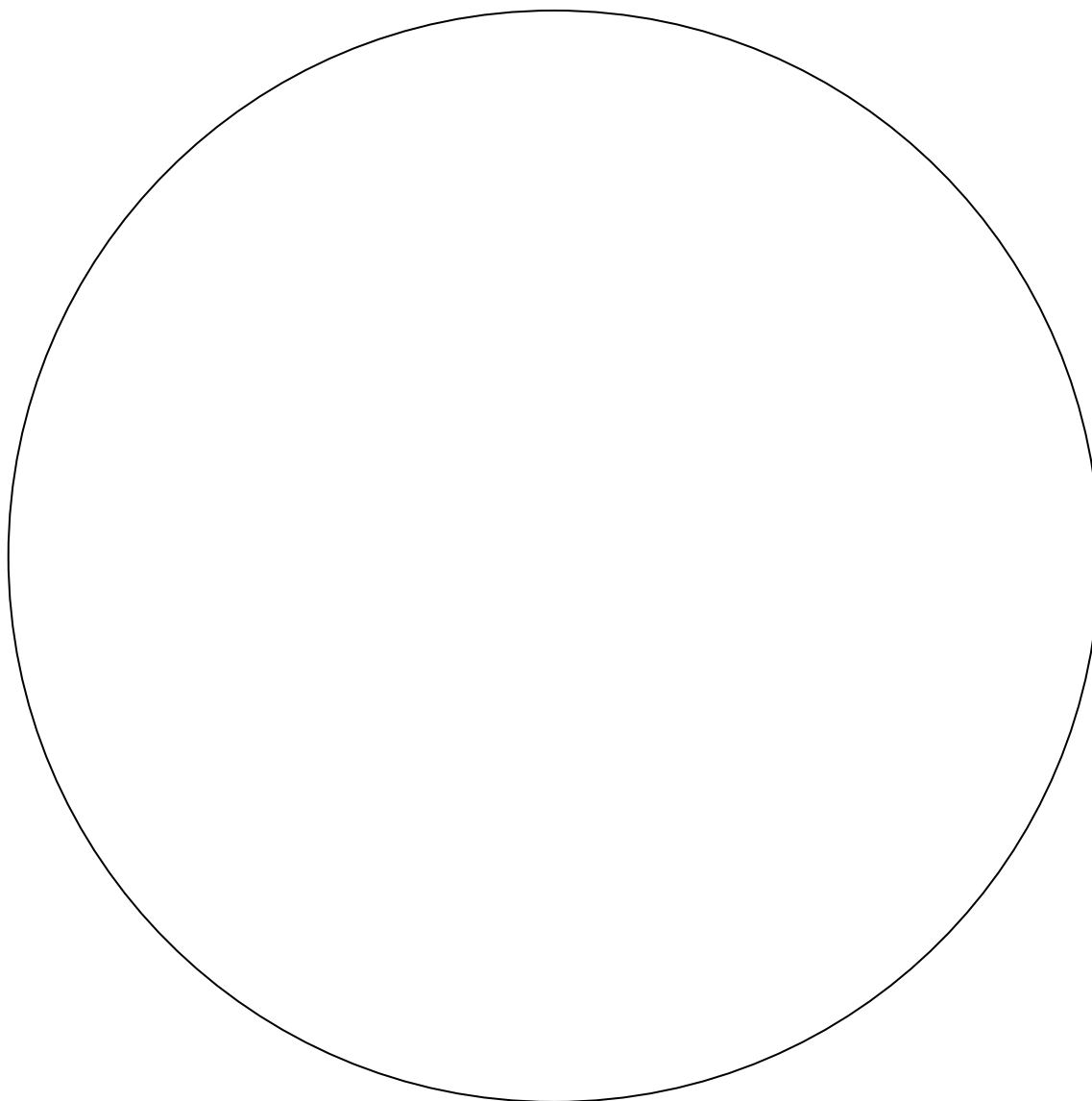
- Instrument used and magnification
- Description of sky-conditions

Grading Criteria:

Neatness: (legible, organized, easy to read and follow):	/10
Answer to PROBLEM #1	/10
Drawings (neatness, accuracy, labeled correctly)	/40
Drawing template on next page - reproduce as needed	

Object

Date/Time



Description