CCD Photometry- part2 2018
Syllabus

Week 1: ***Introductions***

Making Good Quality Measurements

Reading: *CCD Photometry Guide,* Chapter Five, pages 41-44.

Discussion topics. 1) What affects the quality of our measurements?

2) How do we know if our measurements are good?

Class exercise: Setting the measuring aperture.

Week 2: ***Comp Stars, Uncertainty***

Reading: *CCD Photometry Guide*, Chapter Five, pages 48-50.

Uncertainty about uncertainty. Browse or read in entirety if you have time. Use as reference.

VPhot DocumentationA.pdf, pages 5-6, "Error Estimation"

AAVSO APASS web page: https://www.aavso.org/apass

Discussion topics. 1) Picking Comp Stars.

2) Planning uncertainty strategies.

Understanding SNR and the CCD Equation.

Reading: *Measuring the SNR of the CCD Image of a Star or Nebula,* Prof. J.H. Simonetti, pages 1-2.

Discussion topic: "Where is that noise coming from?"

Class exercise: TBD

Week3: ***Transforms***

Reading: *CCD Photometry Guide*, Chapter Six

Discussion topic: 1) What are we doing when we apply transforms, and why is this important?

2) How do we pick standard stars used in calculating transforms?

Class exercise: Use the spreadsheet method in Chapter 6 to calculate the transforms for your system.

Week 4: ***Results of observing project and transforms***

Class exercise: Submit your transformed data for both targets to the AAVSO.

Class exercise and discussion: Compare your transformed and untransformed magnitude estimates for both targets . How does color affect the size of your transform adjustment?

Class exercise: Final exam questions.