

Techniques of Modern Observational Astrophysics

Astronomy 500

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TR, 9:30-10:45 AM, 4th floor Sterling Conference Room
Office Hours: T 11-12 Chamberlin 6297

Class Website: <http://www.astro.wisc.edu/~mab/education/astro500/>
Handouts, lectures and homework and readings will be posted.

Texts:

While there is no single good text for this course, the following are valuable references for this course and in a future astronomical career. The McLean text is required. All of you should look carefully at all the texts, on reserve in the Astronomy Library. If you find them useful, I recommend you purchase your own copies. Walker, Kitchin, and Gray are paperbacks.

Required:

- McLean, "Electronic Imaging in Astronomy," Wiley

Recommended:

- Gordon Walker, "Astronomical Observations," Cambridge Univ. Press.
- Daniel Schroeder, "Astronomical Optics," Academic Press

Other Useful References:

- Kitchin, "Astrophysical Techniques," Adam Hilger, Ltd
- Bevington&Robinson, "Data Reduction and Error Analysis for the Physical Sciences," McGraw-Hill
- David Gray, "The Observation and Analysis of Stellar Photospheres," Cambridge U. Press
- Cox, "Allen's Astrophysical Quantities," Athlone Press

Homework & Exams:

There will be a 4-5 problem sets due over the semester. You are encouraged to discuss the problems with your classmates, but you must each write up your own solutions.

There will also be a Midterm (in-class) and Final (take-home) exam.

Grading:

The approximate weights will be given to your final grade:

Homework	40%	Midterm	25%
Participation	10%	Final	25%