



ASSESSMENT PLAN

ASTRONOMY

MS

(Program of Study / Major / Degree Level, etc.)

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Date submitted to Academic Unit Head: 2/6/06

Program Goals: The Department of Astronomy MS Program educates graduate students toward achieving an understanding of advanced-level modern astronomical concepts, applying technology in the field, performing research, and communicating research results to other astronomers.

Relevance of goals to the mission statements and/or strategic plans of the University, College, or Program as applicable:

These goals are aligned with the strategic plans of the Program and College to offer tracks within the program to reflect modern developments in science, to provide opportunities to work on cutting edge research, and to provide our graduates with the skills of modern technology.

Student Learning Outcomes (list the three-to-five most important)	Assessment Measures and Criteria (describe one or more measures for each outcome and criteria for success)	Assessment Schedule (initial year, and subsequent cycle)
1. Demonstrate advanced-level knowledge of astronomy.	Students complete five required courses: Radiative Processes, Stellar Structure and Evolution, Astronomical Instrumentation and Techniques, Galaxies, and Interstellar Medium and Gas Dynamics. Performance in course work is evaluated as excellent, very good, good, adequate, or not adequate.	The teaching faculty evaluates each student's performance in course work at the beginning of the student's third year. The teaching faculty meets annually for this

	At least eighty percent of students should receive an evaluation of good or better.	evaluation.
2. Retain a working knowledge of key astronomical concepts.	<p>The Qualifier exam is given after the courses mentioned in (1) are completed. Performance on the Qualifier exam is evaluated as excellent, very good, good, adequate, or not adequate.</p> <p>At least eighty percent of students should receive an evaluation of good or better.</p>	<p>The teaching faculty evaluates each student's performance on the Qualifier exam at the beginning of the student's third year. The teaching faculty meets annually for this evaluation.</p>
3. Design a scientific project, complete the research, and communicate the results in an oral presentation and a scholarly work..	<p>It is required that students design and complete a research project that includes an oral presentation and written document during their second year of graduate school. A faculty committee evaluates the research project as excellent, very good, good, adequate, barely adequate, or not adequate.</p> <p>At least eighty percent of students should receive an evaluation of good or better.</p>	<p>The teaching faculty evaluates each student's performance on the second year project at the beginning of the student's third year. The teaching faculty meets annually for this evaluation.</p>
4. Develop expertise in an area of modern astronomy.	<p>Students complete course requirements from one of these Streams: Theory, Computation, Observation, or Instrumentation. Advanced astronomy courses are combined with supporting courses from other departments to provide expertise. Syllabi and course grades will be evaluated across the Stream.</p> <p>At least eighty percent of students should achieve excellent or good performances in their Stream courses.</p>	<p>A departmental committee analyzes syllabi and course grades from Stream courses and makes recommendations to the Chair once every three years beginning in 2007.</p>