

| MS in Physics or Astronomy | | | | |
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| (1) Where are the learning outcomes for this level/program published? (please specify) Include URLs where appropriate. | (2) Other than GPA, what data/evidence is used to determine that graduates have achieved the stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination) | (3) Who interprets the evidence? What is the process? (e.g. annually by the curriculum committee) | (4) What changes have been made as a result of using the data/evidence? | (5) Date of most recent program review (for general education and each degree program) |
| <p>Master's recipients demonstrate minimum competency in outcomes defined for the PhD, assessed in a different way and to a different level of achievement: Students will be able to:</p> <ul style="list-style-type: none"> • Demonstrate the tools to create new knowledge in the discipline of physics or astronomy • Communicate effectively orally and in writing • Solve physics or astronomy problems using logical, mathematical and computational skills • Demonstrate an understanding of the key concepts in the core areas of physics or astronomy • Demonstrate competency teaching physics or astronomy topics and problem solving in a classroom setting | <p>Master's recipients demonstrate competence in one of three ways:</p> <ol style="list-style-type: none"> 1. A co-authored paper 2. Successful completion of core competency requirements (formerly the qualifying exams) 3. A master's thesis | <p>Every year the department reviews students who leave with a master's degree, paying special attention to the two-thirds for whom the department initiated departure.</p> | <p>Recent changes have largely been a response to concerns about equity in students' opportunity to demonstrate achievement of outcomes. Since a time-limited qualifying exam does not reflect real-world circumstances, students demonstrate readiness for candidacy based on high grades in certain courses or, if the high grade threshold is not met, a take-home written assessment and an oral component.</p> | <p>Fall 2018</p> |