

**Mathematical Sciences MS**  
**2016-2017 Student Learning Outcomes**

<b>Outcome</b>	<b>Assessment Methods</b>
<p>1      <i>Students will be able to demonstrate knowledge of the main theoretical results and key methods of core graduate areas in their chosen concentration early in the Program of Study. In particular, students will be proficient in Linear Algebra and in Analysis (Mathematics Concentration) or Statistics (Statistics Concentration).</i></p>	<p><i>Final exam questions</i></p> <p><i>Student Progress Interview</i></p>
<p>2      <i>Students will be able understand and employ the basic tools and methods of core graduate areas in their chosen concentration. Such tools and methods range from theoretical techniques to the construction of models and solution methods. In particular, students will be able to demonstrate mastery in Linear Algebra, and in Analysis (Mathematics Concentration) or Statistics (Statistics Concentration).</i></p>	<p><i>Final exam questions</i></p>
<p>3      <i>Students will be able to communicate mathematical arguments, and present the results of a mathematical/statistical study in a clear, coherent, and convincing manner, both orally and in writing.</i></p>	<p><i>Oral presentation</i></p> <p><i>Independent projects</i></p>
<p>4      <i>Students will be able to conduct supervised, independent projects in the mathematical sciences. In particular, students will be able to formulate, investigate and analyze either a theoretical question or a model of a phenomenon or of data, guided by prior research in theory and/or applications.</i></p>	<p><i>Independent projects</i></p> <p><i>Post-graduation survey</i></p>