

LEARNING OUTCOMES, PERFORMANCE INDICATORS & MEASURES FOR M.A. & M.S. IN BIOLOGY

The M.A. and M.S. degrees require 30 credit hours and a comprehensive exam at the completion of coursework. The M.A. degree is designed for students seeking only coursework; the format (written or oral) of the comprehensive exam is determined by an examination committee. The M.S. degree is designed for students seeking research experience, and includes 24 hours of formal course credit, 5 credits of thesis research, 1 credit for a thesis proposal course, and a written research thesis. This degree requires passing a formal thesis proposal defense (which includes oral, written, and visual presentation of the proposed research) and passing a formal defense of the thesis research, which serves the function of a comprehensive final examination. The learning outcomes/objectives outlined below are intended to prepare graduates to be competitive and desired in programs or careers beyond JCU, for employment with non-profit organizations, governments, and private or government consulting agencies that conduct research, or for positions in academics and research.

Date Modified: 25 April 2016

Learning Outcomes/Objectives Students will be able to:	Indicators of Performance	Measures	How is the Information Used?
<p>1. Knowledge: demonstrate a deep knowledge of biology and develop advanced competency in specific areas of interest consistent with the primary focus of the program that the student develops with their faculty-based committee.</p>	<p>Understanding of deep knowledge of biology, specifically in areas of interest consistent with the primary focus of the program that the student develops:</p> <p>A Molecule-to-Cell & Cell-to-Organism.</p> <p>B. Organism-to-Biosphere.</p>	<p>Performance on essay questions or signature assignments in 400- and 500-level courses (results may be reported as “exceeds expectations”, “meets expectations”, or “doesn’t meet expectations”):</p> <p>A Molecule-to-Cell & Cell-to-Organism: BL470; BL510; BL520; BL559; BL565; BL571; BL575.</p> <p>B. Organism-to-Biosphere: BL406; BL415; BL417; BL419; BL444/L; BL447/L; BL523/L; BL524/L; BL526/L; BL535/L; BL540; BL554; BL554L.</p>	<p>The Biology Assessment Coordinator will collect the evidence from instructors each year. This evidence will be provided to Biology faculty and discussed at a departmental faculty meeting. A biennial report of evidence will be submitted to the university’s Director of Assessment.</p>
<p>2. Research Methods & Analysis: <u>_____demonstrate a deep</u></p>			

