

Assessment Plan for Biology MA program: 2009-2014

Student Learning Objectives	Courses Resulting in Achievement of Objectives*	Activities Resulting in Achievement of Objectives*	Measures of Achievement of Objectives*	Timetable
1) Expertise in areas of biology related to course of study or thesis topic.	Biology electives in MA program or BIO695	Course discussions, projects and papers and/or thesis research	Passing score on comprehensive exam (consisting of 5 subject areas identified by student and advisor) or thesis	2012-2017
2) Analytical skills required to interpret and evaluate research literature	Biology electives in MA program and/or BIO695	Course discussions, projects and papers and/or thesis research	Imbedded “data analysis” questions on comprehensive exam or literature review component of thesis	2012-2017
3) Proficiency in professional scientific writing	Biology electives in MA program and/or BIO695	Written course assignments and/or thesis	Writing samples from three 600 level graduate electives or thesis	2012-2017
4) Proficiency for effective oral communication of biological information.	BIO617 and/or BIO695	Student presentations, reports and/or thesis defense	Final oral presentation of BIO617 or thesis defense seminar	2012-2017
Learning Objectives Specific to Thesis Option				
5) Ability to plan and conduct experimental research	BIO695	Thesis research	Approval of thesis proposal and defense by thesis committee	2012-2017
6) Apply accepted standards for ethical science	BIO695	Thesis proposal and thesis research	Approval of thesis proposal and thesis by thesis committee	2012-2017

* The Biology MA program has two options (thesis or comprehensive exam) that impact both learning outcomes and assessment of outcomes. For each learning outcome the thesis activities (research proposal, thesis defense and final thesis) represent the highest standard of student accomplishment and are the preferred measurement of achievement. The non-thesis measures are intended for those students in the comprehensive exam option. Learning objectives 5 and 6 are specific to thesis students who receive extensive training on the practice and standards of experimental investigation.