

**Student Learning Assessment Program
Response to Summary Form
Graduate Program 2005**

Department: Biological Sciences

Category	Level*	Comments
Learning Objectives	Level 2-3, M.S. Biological Sciences	The objectives are programmatic and are measurable. You may want to cut the “to successfully fill employment. . .” from your objectives. They can stand alone as what you want students to accomplish in the program. It can be problematic to tie successful achievement of objectives to something as fickle and out of your hands as the job market. Instead, you might describe what “appropriate skills” look like or define more specifically what they are.
	Level 3, M.S. in Natural Sciences	Objectives are much clearer and more student learning-driven than the objectives on last year’s plan. With these objectives, you should have a clear picture of what students in your program are expected to be able to know and to do upon completion of the degree. Much improved!
How, Where, and When Assessed	Level 2, M.S. Biological Sciences	The direct measures listed here are much more driven by the program than the ones from last year, so that’s a good improvement. When you mention that you are using lab exercise and exams from graduate courses, it isn’t clear what you are collecting for the purposes of assessment and how those artifacts are assessed. Do you have rubrics, etc. ? Do the faculty know what needs to be reported to the graduate coordinator? While it is important to track the number of students completing theses, co-authoring articles, and presenting at conferences, the measurements for objective 2 should also assess how WELL the students are doing on these activities. This objective is about conducting and presenting research, so how can you use those presentations and papers to judge how successfully students have attained this objective? The measure for objective 3 is listed as whether students are advised to take particular courses, but can you use their research and lab work to determine their quantitative skills? OR something more direct than what classes they take? Using the oral defense and examination are good direct measures.
	Level 2, M.S. in Natural Sciences	The measurement listed for the first objective is awfully vague. What exactly is the course work that will be used to assess this objective? What courses? Are you intending to use particular exams, labs, projects? The second objective’s measures are a bit more specific, but need to be more clearly defined, so it is understood what you will be gathering from year to year and comparing across time. Using the research proposal is an excellent choice. Have you determined how you will assess this

* Levels should not be interpreted as grades or scores; they are stages of implementation based on patterns of characteristics described by North Central Association. These levels are approximations based on the information provided in the summaries. Please refer to the checklist for the Primary Traits listed for each level.

		artifact? That is, have you developed primary trait analysis for it or a form to use to compare across students, faculty, and years?
Expectations	Level 2-3, M.S. Biological Sciences	The expectations column here is more explicit than the measures column, so it appears like certain artifacts are being targeted for assessment. The expectations are clear and appropriate for the most part. Be careful about using grades as an expectation. How can you fully connect that course grade to the objective and what does it tell you about student learning of the objective?
	Level 1-2 , M.S. in Natural Sciences	I would caution you to understand that grades often encompass many issues/criteria that do not speak to the objective, so they do not often provide good assessment data—unless they are connected to primary trait analysis that specifically speaks to the objective in question. It is not clear that that is the case here.
Results	Level 2, M.S. Biological Sciences	Is there a difference between “acceptable skills” and “appropriate use” of lab equipment? It sounds like a nit-picky question, but rubrics generally make distinctions between skills that are acceptable and appropriate and often there are difference skills connected to such words. It’s a good idea to add an exit survey to your measures to provide some indirect measures and additional information from your students. While there is still some work to be done, it is clear that results are being collected and used in this program.
	Level 2, M.S. in Natural Sciences	From the results listed, it doesn’t appear that a great deal of data has been collected. You state that “100% of students have demonstrated appropriate use of laboratory equipment. . .” but it isn’t clear what data was collected for how many students each year. When you say that 100% of proposals have been evaluated as “worthy” does that mean that you have a rubric to explain what that means? In Part Three you mention that you have reduced the concentrations from six to two, but it is not clear why that occurred.
How Results Will be Used	Level 2, M.S. Biological Sciences	A feedback loop is in place and appears to be working for the improvement of the program. You mention in Part Three that you have certain technological expectations for your students. You may want to consider making this expectation an objective in future plans since it is something that you look for in your students’ work.
	Level 2, M.S. in Natural Sciences	The feedback loop appears to be in place.