3. MS Meteorology Program

A: Comprehensive List

The department’s Comprehensive List is Developed, with some elements of Highly Developed.

The Comprehensive List of PLOs is a well-organized and focused set of outcomes and specific expectations for this MS program. The focus is on key skills and knowledge that students develop and learn in the program. PLO-1 can only be satisfied by students who have developed critical thinking and communication skills, and thus institutional outcomes are addressed in the list.

Outcomes are appropriate for the graduate level (e.g., speaking to an understanding at an “advanced” level), and are in line with outcomes in similar programs nationwide. Graduate students are generally required to earn a grade of “B” or better in each class in order to complete the program. Clear criteria (rubrics) have been developed for all facets of thesis work. To become ‘Highly Developed’, faculty will develop rubrics for the core graduate classes in the program.

We note that the Comprehensive List was revised in Spring 2011 from an earlier iteration which was too sharply focused on individual classes, as opposed to broader desired outcomes.

B: Assessable Outcomes

The department’s Assessable Outcomes are Developed.

The PLOs are written so as to make clear how students can demonstrate learning. For example, PLO-1 states: “Be able to conduct an independent research project...” Students demonstrate their learning through their performance on midterms, quizzes, in class discussions, and the ultimate performance: a successful MS thesis written and orally presented and defended. In order to become ‘Highly Developed’ faculty will develop rubrics for the core graduate classes in the program. The rubrics will have explicit criteria for “does not meet,” “meets,” and “exceeds...
expectations.” Student examples that represent the different levels of mastery will be gathered, reviewed and analyzed to further assess department-wide learning results.

**C: Alignment**

The department’s Alignment is Emerging, with some characteristics of the Developed category.

The department’s previous set of PLOs were mapped into our curricular offerings. This mapping has not yet been revised to reflect the new PLOs. In order to become “Developed” the curriculum mapping needs to be revised to reflect the new PLOs. Additionally, PLOs are not yet shown on the department’s website, and thus they are not readily available to students (PLOs are shown at the main SJSU website). The Department will place the curriculum map online, and include a clear explanation of how the curriculum map relates to the PLOs.

**D: Assessment Planning**

The department’s Assessment Planning is Emerging.

The department Assessment Planning is “Emerging”, since we are forced by workload and staff shortages into selecting on a year-to-year basis which outcomes will be assessed in the current year. The department does have a general plan for graduate student assessment in that students are generally required to achieve a grade of “B” or better in all core classes. A multi-year assessment plan was developed for the original set of PLOs, and will be developed and posted online for the newly-revised set of PLOs. Once the plan is made more explicit, the Assessment Planning will be “Developed”. The Department had a five year plan and was part-way through the five year cycle. However, following multiple retirements and staffing cutbacks, the department has been unable to complete the process, and has had to fall back on short-term planning.

**E: The Student Experience**

The department’s Student Experience is Initial with some characteristics of Emerging.

Learning outcomes in individual classes are included on all greensheets, are discussed with students at the start of the semester, and are assessed throughout the semester. PLOs are posted on the campus website but not the department website. Students are not explicitly directed to look at the PLOs. Therefore we are “Initial” in this category, with some characteristics of “Emerging.” The Department plans to post the PLOs on the department website, and faculty will incorporate discussion of PLOs at the start of each semester. For the graduate program, PLOs will be addressed in the “Welcome to grad school” meeting early each Fall.