

Department of Meteorology & Climate Science

College of Science

WASC Program Outcomes Rubric, Fall 2014

1. BS Meteorology Program

A: Comprehensive List

The department's *Comprehensive List* is *Developed*.

The Comprehensive List of PLOs is a well-organized set of reasonable outcomes and specific expectations for the program which focus on key knowledge and skills that students learn in the program. The list contains outcomes that are relevant to the institutional outcomes pertaining to communication (PLO-5). Outcomes pertaining to critical thinking are still emerging.

Outcomes are appropriate for the undergraduate level, and are in line with outcomes in similar programs nationwide. Faculty enforce the criterion that students must achieve a “C-” grade or better in each major class in order to advance (similar criteria apply in support classes such as MATH).

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.

The campus has now developed its institutional Learning Outcomes, posted at [here](#). A link to these will be added to the department's Assessment page [here](#).

For the Comprehensive List to move into the *Highly Developed* category, the department will need to develop “explicit criteria for assessing students' level of mastery of each outcome”.

B: Assessable Outcomes

The department's *Assessable Outcomes* are *Developed*.

All PLOs are written so as to make clear how students can demonstrate learning. For example, PLO-1 states: “Be able to read and interpret various meteorological diagrams.” Students demonstrate their learning through their performance on midterms, quizzes, in class

discussions, and writing exercises. In order to become *Highly Developed* the department will need to develop criteria statements in the form of rubrics for the upper division written, oral, and mathematical assignments. Some greensheets include such rubrics.

In order to develop student examples that represent the different levels of mastery, the faculty will collect student samples that reflect grades of “A”, “B”, “C”, and “does not meet expectations” student work related to specific teaching assignments. The department plans to review and analyze student samples collected to further assess expected department-wide learning results and explicit assessment criteria. This will happen on an ongoing basis, and will next happen in Spring 2015.

C: Alignment

The department’s *Alignment* is now in the *Developed* category.

The department’s PLOs have now been mapped into the curricular offerings, with the results shown [here](#).

In order to become Highly Developed, additional efforts will be made to convey the mapping information to students at various times during their school life (e.g., freshman, sophomore etc.) the department will also work to develop coherent grading practices to align with outcomes.

D: Assessment Planning

The department’s *Assessment Planning* is *Developed*.

The department Assessment Planning is now largely *Developed*, with a few elements still in *Emerging*. The department *does* have a general plan for student assessment in that all students are required to achieve a grade of “C-” or better in all majors classes. Additionally, a multi-year assessment plan has now been developed for our PLOs, and is posted online [here](#). Due to the lack of faculty, together with faculty departures and sabbaticals, we are reduced to selecting on a year-to-year basis which outcomes will be assessed in the current year.

In order to move into the *Highly Developed* category, the department will need to receive more resources, freeing up time to properly and fully conduct assessment activities. Resources could include more faculty, or release time for the chair/faculty/PT faculty to conduct assessment work on the department level. Currently, the chair does most of the work, but is only chair on a 40% basis.

E: The Student Experience

The department's *Student Experience* is *Emerging*.

Our policy is that learning outcomes in individual classes are should be included on all greensheets, discussed with students at the start of the semester, and are assessed throughout the semester. There is no effective mechanism in-place to “police” this policy since faculty and chair resources are stretched very thin. PLOs are now posted on the [department website](#) as well as on a campus website. Students are directed to look at the PLOs in some, but not all classes – this can be improved upon. The Department plans to remind faculty to incorporate a discussion of PLOs at the start of each semester and include links on greensheets.