**Recommendations for Completing your Three-Year Student Learning Assessment Plan**

**Key Due Dates for completed document (please note other deadlines throughout):**

Initial assessment plan draft DUE APRIL 1; Final version DUE MAY 15

This document is designed to provide guidance on completing a three-year student learning assessment plan for CU Boulder. This includes guidance on program learning outcomes, curriculum mapping, mapping CU Boulder Baccalaureate learning goals, assessment methodology and reporting schedule. While this document contains strategies and advice to inform good assessment work, completing the assessment plan will still require independent work from participating academic units.

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# **Program Learning Outcomes (PLOs)**

[Program Learning Outcomes section is DUE DECEMBER 1]

It is important that PLOs are specific, realistic, and measurable. PLOs are not expected to cover everything students will learn in their program. Rather, PLOs should cover the core learning expected of every student. To keep assessment processes manageable, we recommend approximately six PLOs.

Guidance around the number of PLOs:

* Required minimum of 3 outcomes
* Recommend 4-6 outcomes
* Maximum of 10 outcomes

For more information about writing good learning outcomes click [here](https://www.colorado.edu/oda/sites/default/files/attached-files/program_learning_outcomes_v2.pdf) or visit our website:

https://www.colorado.edu/oda/sites/default/files/attached-files/program\_learning\_outcomes\_v2.pdf

The most effective program learning outcomes share a common format with two key components.

1. A condition or antecedent (i.e., After completing [learning activity - likely a degree program]).
2. An action or behavior (i.e., a knowledge, skill, attitude, or behavior) that a student will be able to demonstrate.

Recommended Template: After [completing learning activity] students will be able to [action/behavior/skill]

Here are some example Program-level learning outcomes that might serve as a guide.

Sample Program Learning Outcomes (“Upon completing a degree in [program] students will be able to....”)​

* Communicate [domain] concepts clearly and concisely, both verbally and in writing.​
* Critically analyze others’ arguments using relevant theories of [some domain].​
* Demonstrate an understanding of artistic practice, including conceptualization, skill development, constructive critique, revision, and public dissemination.
* Employ multiple research methods to describe and explain [domain/disciplinary concepts].

Reminder: PLOs must be updated in the course catalog. For questions or assistance from the Registrar on this step, go to the “Resources” section on their [Catalog Production](https://www.colorado.edu/registrar/faculty-staff/curriculum/catalog) website, or email catalog@colorado.edu.

# **Curriculum Map**

[Curriculum mapping is DUE BY FEBRUARY 1]

For information about curriculum mapping, start [here](https://www.colorado.edu/oda/assessment/conducting-assessment/curriculum-mapping) or copy/paste this link:

https://www.colorado.edu/oda/assessment/conducting-assessment/curriculum-mapping

To further explore aligning program outcomes via curriculum mapping click [here](https://www.colorado.edu/oda/sites/default/files/attached-files/curriculum_mapping_v2.pdf) or copy/paste this link: https://www.colorado.edu/oda/sites/default/files/attached-files/curriculum\_mapping\_v2.pdf

## Purpose

Curriculum mapping will help your program examine the alignment of your PLOs and your program’s courses.  If you find that a PLO does not appear to be covered sufficiently by your required courses, it would suggest a problem with either the PLO or the curriculum (i.e., Is this PLO a core learning outcome of your program? If so, why is it not addressed in required coursework?). Curriculum mapping is a useful exercise which provides an opportunity to determine whether any gaps or insufficiencies exist in your current program curriculum that may need to be corrected in order for PLOs to be successfully achieved by your students. For the purpose of assessing the learning outcomes in your program, it will also help you identify in which courses each PLO can best be assessed

## How to complete the curriculum map

Indicate which courses align with which PLOs.  We encourage you to use the “levels” of instruction/learning for the PLOs.  For example, you might have an outcome like “Students will be able to identify foundational theories X, Y, and/or Z of [some topic].”  That PLO might be introduced (=1) in the intro classes, reinforced (=2) in the mid-level classes, and emphasized (=3) as part of a senior capstone course or senior seminar.  (However, not all PLOs will include all three levels of instruction in the curriculum map.)

## Which courses do you map?

Complete the curriculum mapping for *all required courses for the major*. Departments often have a “choose one of the following…” component across elective courses, or they may have categories or buckets of courses from which students choose 1 (e.g., “students must take 1 course from among the three methods course options”). It may be helpful to map these as well.

# **Assessment Methodology and Reporting Schedule**

[Rough Draft DUE APRIL 1]

[Final draft DUE May 15]

For each PLO, four items are required to complete the assessment methodology section of the Assessment Plan: (1) reporting timeline, (2) assessment method, (3) metric and target for measuring and determining success, and (4) brief description of the assessment.

## Reporting timeline

Copy and paste the Learning Outcomes that were identified into the table. Next indicate during which years you will report on which outcomes.

Some things to remember:

* We do require that you collect data and report on at least 1 PLO per year AND that each PLO gets reported at least once over the 3 year assessment cycle.
* When developing your plan and reporting timeline, we recommend starting with one or two learning outcomes in the first year that are more straightforward to assess. This will help you build momentum and have a successful first year!
* Also consider how often courses chosen for assessing a PLO are offered, and which PLOs will be assessed at the same time as other PLOs. For example, if you are using a specific course or project to assess multiple PLOs (see below), you may want to report on all of those PLOs in the same year.
* Also note: you don’t need to report on a PLO every year that you collect data on it—this is especially relevant if you have multiple assessments (say, an indirect and a direct assessment) of a particular PLO. You might collect data for a PLO every year but report on that PLO only once using data from multiple years or semesters.

## Assessment method(s)

Describe your approach for data collection, indicating whether the method provides direct or indirect evidence of student learning. *Note that each PLO must have at least one assessment method that uses direct evidence of student learning.* For more information about direct and indirect evidence click [here](https://www.colorado.edu/oda/assessment/conducting-assessment/data-collection-and-types-evidence) or copy/paste this link: <https://www.colorado.edu/oda/assessment/conducting-assessment/data-collection-and-types-evidence>

The assessment method you choose for a PLO should be specific to that PLO

* If the method you select could be used to measure multiple PLOs, it is not specific enough.
* You should not use the same method for multiple PLOs.  For example, proposing the final exam score for [XXXX 2000] as the assessment method for PLOs 1, 3, AND 5 is not good practice.  It suggests that assessment method (the final exam score) is not a specific measurement of any one of those PLOs.
* Consider having a specific question or prompt on an exam targeted at one of your PLOs, or use a subset of questions, specific to the PLO, from the exam.  In the example provided in the previous bullet where a final exam covers material from three separate PLOs, you could break the final exam into components for each of three PLOs and use the subscores for each component to assess the three PLOs, or select a question from each component as your assessment for each PLO.

Consider what level of proficiency of the PLO would be most helpful to assess.

* If “XXXX 1000” *introduces* (see your curriculum mapping) some foundational concept that is captured in one of your PLOs, it might make sense to assess it in that class, even though it probably won’t be the last time students encounter that concept.
* Even better, you could measure it twice—once early on (e.g. “XXXX 1000”) to assess whether students are mastering foundational content and once later on (e.g. an upper-division seminar or capstone) to ensure they are graduating with a more advanced understanding.
* Reminder: Only one direct measure of each outcome is *required*, so you don’t have to do both.  But, think about what might be helpful for future curriculum planning, course development, demonstration of student learning, etc.

## Example Assessment Methods

Here are some broad examples of assessments being used or considered at CU:

* *A specific essay score or subset of short-answer/multiple choice questions from an exam (including a final exam) in a course.*
* *Same as above, but with a stand-alone assignment.*
* *A rubric assessing specific PLOs on a final project/capstone/thesis/performance/etc.*
* *A department-designed set of questions that are asked of all majors—a department-wide quiz.*
* Faculty committee review of learning artifacts (e.g. portfolios, specific assignments, etc.) ​
* *A midterm or final exam grade if and only if that exam is very specific to that PLO.* Note all my caveats above. But, for example, let’s say you have a PLO that is something like “students are able to analyze quantitative data using appropriate statistical methods” AND you have a course that is “Statistical Analysis of Quantitative Data,” it might be acceptable to use the final exam score from that course.

## Metrics/Targets

**Metrics** are calculated from collected data to measure student learning, and **Targets** set a threshold for that metric to determine if an acceptable level of learning was met. Assessment targets are essentially "goal posts" that allow for a more concrete determination of whether a PLO was achieved.

* We ask you to define “metrics” and “targets” for your assessments.  This will probably be something like “*At least 80% of students will ‘meet expectations’ (or higher) on the PLO assessment rubric for their final paper in XXX3500.”* In this example, the “metric” is the “percentage of students that met expectations” (based on their PLO score received in the rubric) and the “target” is “80%.”
* Targets should be manageable, slightly aspirational goals for the degree of proficiency that you hope your students will achieve on that PLO as assessed with that method.
* Targets can feel a little arbitrary—especially at first.  Without prior assessment data, it can be difficult to know what will make a good target.
	+ You can always recalibrate the target in your report or for the next assessment cycle
	+ There are no repercussions for not meeting it; rather, the gap will give you something to discuss, react to, or take action on.
	+ It’s helpful to have a fixed target in your head *before* you see the data to provide an anchor against which to consider the actual outcomes.  If you get data back that suggests *80% received a “met expectations” score,* you want to have some number in mind that allows you to think, *boy, that’s much better than we expected* or, *wow, that’s a lot less than we had hoped*.
	+ Without that target in mind and on paper, it’s very easy for any outcome to simply slide into “acceptable” territory with little reflection as to whether you would have considered it acceptable a priori.

Note: Metrics and targets are not designed to be used punitively. Rather, programs that do not meet their specified targets (once data is collected and reported in subsequent years) should acknowledge that targets were not met and discuss possible reasons why, develop a plan to address those reasons, and then implement changes. That is the goal of assessment planning and reporting!

## Description of Assessment

This column is a short summary that contains additional information about the assessment methods (e.g., how and when the data will be collected).

## Examples

The examples below are modified examples from departments at CU Boulder.

PLO 1: **Students will learn to use a variety of research methods to help describe and explain [discipline-specific area of focus]**

|  |  |  |
| --- | --- | --- |
| **Assessment Method** | **Metric/Target** | **Description of Assessment** |
| SUBJ 2000 four projects (direct measure) | For each of the four projects (each pertains to a different research method), at least 80% of students will receive at least 70% of the points. | SUBJ 2000 is taught every semester. Projects are done by groups of students and are graded by instructors using a scoring rubric. Scores from the four projects will be averaged. |

PLO 2: **Understand the theoretical foundations of [discipline/field of study]**

|  |  |  |
| --- | --- | --- |
| **Assessment Method** | **Metric/Target** | **Description of Assessment** |
| SUBJ 1000 Final Essay(Direct Measure) | 80% Proficient (score of 75% or equivalent points)40% Advanced proficiency (score of 87% or equivalent points) | Score for essay about foundational theories of [discipline/field]. This course is taught every fall semester. |

PLO 3: **Communicate effectively in a variety of professional contexts.**

|  |  |  |
| --- | --- | --- |
| **Assessment Method** | **Metric/Target** | **Description of Assessment** |
| Grading interviews twice per semester from SUBJ 2000Direct Measure | At least 80% of majors in this course receive an 80% or higher on the assessment. | SUBJ 2000 is taught in fall and spring semesters, and interview grades will be collected in all sections. This assignment requires students to communicate effectively to a TA. If more than one interview takes place, scores will be averaged.  |
| Group Project from SUBJ 4000 | At least 80% of majors in this course receive an 80% or higher on the assessment. | SUBJ 4000 is taught in fall and spring semesters. This group-based assignment includes grading criteria that students communicate via written reports and verbal presentations. The assessment metric will be the average of the writing score and the verbal presentation grade from this assignment. |

PLO 1: **Students will be able to apply key [relevant type] methods for generating insights from data**

|  |  |  |
| --- | --- | --- |
| **Assessment Method** | **Metric/Target** | **Description of Assessment** |
| Capstone Project from SUBJ 4800(direct measure) | At least 80% of students will be receive an 8/10 or better on the rubric item for “data analysis” for the capstone project  | SUBJ 4800 is taught every spring and is a capstone, project-based course. The grading rubric for the final project will include a sub-score rubric item for data analysis. That sub-score will be reported and used as the assessment metric. |

*\*\* Note that final course grades are generally not acceptable assessment metrics for measuring a PLO. (In extremely rare cases may there be an exception to this rule.) Evaluations of learning related specific PLO should be based on individual pieces of evidence or learning artifacts (e.g., assignment, paper, presentation, exam, subset of exam, etc.) that are specific to that PLO. Final course grades often consist of factors outside of learning a single outcome (e.g., participation, group scores, following disciplinary style guides).*