

# PROGRAM ASSESSMENT HANDBOOK

Prepared by the University Office  
of Evaluation and Educational  
Effectiveness



## Key Dates

**AUG 31**

Assessment plans due to UOEEO for new programs seeking establishment

**OCT 30**

Annual assessment reports due to UOEEO

**DEC 2**

Assessment plans due to college assessment delegate

## Table of Contents

<b>ASU's Philosophy and Approach to Program Assessment</b> .....	<b>1</b>
University Office of Evaluation and Educational Effectiveness.....	1
<b>Cycle of Assessment</b> .....	<b>2</b>
<b>Key Processes and Due Dates</b> .....	<b>3</b>
<b>Program Assessment at ASU</b> .....	<b>4</b>
<b>Program Assessment Plans</b> .....	<b>5</b>
<b>New Program Application Approval Process</b> .....	<b>5</b>
<b>Academic Program Review (APR)</b> .....	<b>6</b>
a. Reflective Essay.....	7
b. Approval of a Revised Assessment Plan.....	7
<b>Program Learning Outcomes Published in Degree Search</b> .....	<b>9</b>
<b>Program Disestablishment</b> .....	<b>9</b>
<b>Elements of a Program Assessment Plan at ASU</b> .....	<b>10</b>
<b>Mission Statement</b> .....	<b>12</b>
<b>Program Goals</b> .....	<b>13</b>
<b>Program Learning Outcomes</b> .....	<b>14</b>
Considerations When Developing Program Learning Outcomes.....	14
How to Write Program Learning Outcomes and Examples.....	15
<b>Concepts and Competencies</b> .....	<b>17</b>
Concepts.....	17
Competencies.....	17
<b>Curriculum Mapping (IRMA)</b> .....	<b>18</b>
<b>Assessment Process</b> .....	<b>19</b>
<b>Measures</b> .....	<b>20</b>
Direct and Indirect Measures.....	21
Formative and Summative Measures.....	22
Examples of Measures.....	22
<b>Performance Criteria</b> .....	<b>23</b>
Challenging Criteria.....	23
Utilizing Rubrics.....	23
Example Rubric.....	24
<b>Annual Program Assessment Plan Reviews</b> .....	<b>24</b>
Assessment Plan Rubric.....	25
<b>Annual Assessment Report Process</b> .....	<b>27</b>
Assessment Report Section 1: Assessment Changes, Participation and Reflection.....	28
Assessment Report Section 2: Outcomes Reporting.....	29
Assessment Report Rubric.....	30
<b>UOEEE Program Assessment Resources</b> .....	<b>32</b>
<b>Assessment References from ASU Library Resources</b> .....	<b>32</b>

## ASU's Philosophy and Approach to Program Assessment

The purpose of assessment in higher education is to provide evidence that will inform and support improvement in student learning and student success. Assessment of student learning is a planned process that collects data to be analyzed and discussed and when needed, support change. Assessment data is meant to improve knowledge and insight for all stakeholders including faculty and administrators. Collecting valid and reliable student learning data allows for informed planning and decision making around curriculum and pedagogy. Institutions are expected to assess all educational programs offered for academic credit (i.e., courses taken for degree and certificate programs) as well as curriculum complementing activities such as study abroad, service learning, career services, and student-faculty research experiences. Assessment at ASU is not used for the evaluation of program performance or to evaluate individual faculty performance. Multimodal assessment methodologies collect data on student learning and related indirect data on students' perspective, attitudes, and dispositions. With assessment, faculty have the ability to analyze data and draw conclusions that inform continuous improvement of curriculum and pedagogy.

Assessment guidelines and practices at Arizona State University (ASU) are influenced by national organizations such as American Association of Colleges and Universities (AAC&U), Association for the Assessment of Learning in Higher Education (AALHE), and National Institute for Learning Outcomes and Assessment (NILOA) as well as ASU's regional accreditor, The Higher Learning Commission (HLC). These entities expect a robust assessment infrastructure that identifies both strengths and weaknesses of student learning to ensure ASU delivers high quality programs where students successfully meet the established program learning outcomes and general education outcomes.

In addition to these guidelines, assessment at ASU is also guided by [ASU's Charter](#). This charter serves as the university's mission statement and guides all college, department, and program level mission statements and goals. It reads:

*ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural, and overall health of the communities it serves.*

### University Office of Evaluation and Educational Effectiveness

The assessment department within University Office of Evaluation and Educational Effectiveness' (UOEEE), is tasked with supporting academic programs in their development of methodologies to produce valuable and meaningful data for continuous improvement at ASU.

UOEEE's assessment goals include:

1. Advance a culture of data-based decision making and continuous improvement.
2. Create a culture of assessment that is transparent and informs the ASU community (including stakeholders) about student learning.
3. Develop and implement a process that results in continuous improvement of student learning. The process should be both systemic and systematic.

4. Support the community in using assessment practices that result in valid, reliable, and meaningful assessment.

## Cycle of Assessment

The purpose of academic assessment efforts is to continually increase the quality of education provided to students at ASU through a cycle of assessment and evaluation (see Figure 1). This is accomplished in several ways such as supporting programs in the development of academic assessment plans (e.g., program learning outcomes), annual reporting, new program proposals, the assessment of general education, and academic program review (APR). UOEEE also provides the resources for these assessment activities through its [website](#), [Canvas site](#), and [assessment portal](#). The assessment portal is a particularly dynamic tool that provides a single place for faculty to input their assessment plan and reports, submit new program applications, and receive input and approval from UOEEE. Even more importantly, it also serves as a repository for historical data that can be utilized for longitudinal analysis.

UOEEE staff also consult with and provide support to ASU's co-curricular areas ([EOSS](#)) when requested. The assessment staff provide resources and support for assessment through the assessment portal, assessment reports, workshops, technology, special projects, resources, and research.

**Figure 1**

*Program Assessment Cycle*



## Key Processes and Due Dates

*\*Please note that the academic school year runs from August to July*

# Upcoming Submission Dates

## Plans

Programs are expected to submit a first draft of their updated APR assessment plans to UOEEE by **August 15th**.  
New program assessment plans to be submitted to UOEEE by **August 31st**.

College delegates complete review of reports in October and move to review of plans in December.

Academic units submit program assessment plans to college delegates by **December 2nd**.  
Programs undergoing APR are expected to have their revised assessment plans approved by **December 2nd**.

College delegates complete review and work with units on changes to plans in December and January, submitting them to UOEEE by **February 1st**.

Delegates approve plans that have been changed, or continuing for plans with no changes by **February 1st**.

## Reports

Academic units submit program reports to college delegates by **September 30th**.

College delegates review reports and work with units on changes throughout October. Due date to UOEEE **October 30th**.

UOEEE reviews reports and scores rubric in November and December. UOEEE sends delegates rubric scores identifying strengths and problem areas **December 30th**.

August

September

October

November

December

January

February

March

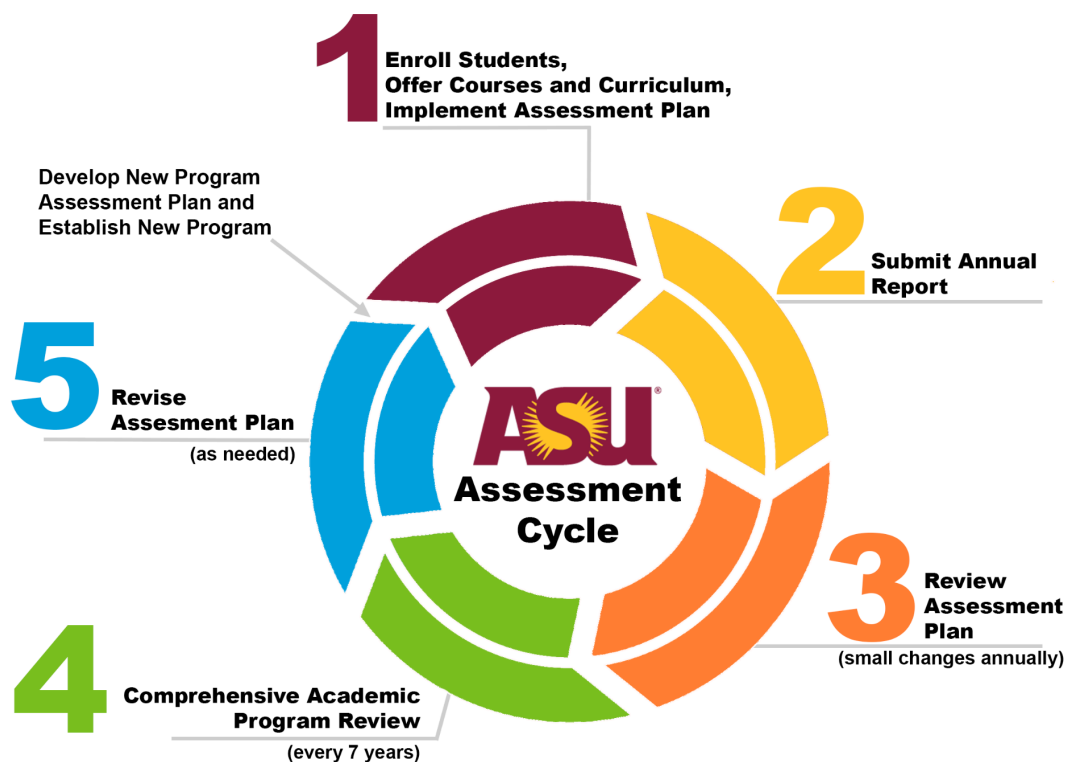
All revisions to report and plans must be completed by the Portal change-over, **March 30th**.

## Program Assessment at ASU

All credit-bearing programs, degrees, and certificates are required by the Higher Learning Commission to participate in institutional evaluation (assessment, program review). This includes AA, BA, BS, MS, and PhD programs among others. UOEEE does not currently require minors to be assessed. Programs are expected to plan for and report data on both in-person students, as well as their online students separately (as determined by their registered campus). Programs with  $\geq 20$  online students, will be expected to provide data specific to their online students. A student is considered an “online student” when their registered campus is “Online” (as opposed to Tempe, Poly, etc.).

Academic program assessment at ASU follows a process that is structured, ongoing, and designed to measure the extent to which graduates leave the institution with the knowledge and skills expected of its majors. The program assessment process (see Figure 2) begins with programs developing an assessment plan proposal as part of their new program proposal materials sent to ABOR. Upon establishment, programs will maintain their assessment plan along with submitting an annual assessment report with student learning data based upon the assessment plan. This cycle of development, assessment, review, and update, informs subsequent decisions and activities and continues until a program’s disestablishment. An assessment methodology should be designed in such a way as to provide insight on the breadth and depth of the curriculum.

Figure 2



## Program Assessment Plans

Assessment plans serve as the foundation for evaluation of student learning at ASU, they outline student learning outcomes to be assessed during a term, identify specific artifacts and performance criterion to track student learning, provide a brief description of the data collection and analysis processes, and identify the individuals responsible for these tasks. Programs conduct a comprehensive re-evaluation of their assessment plan every seven years at the time of their Academic Program Review. Programs can coordinate with their assessment delegate to review their assessment plans and make adjustments annually to ensure that they are accurate and meet the needs of the program. This annual reevaluation does not require UOEEE reapproval.

UOEEE provides various resources to help you with your assessment plan and reports. These can be found in this handbook, on the [UOEEE website](#) and on our [Canvas resource page](#).

## New Program Application Approval Process

The university process for establishing new programs includes both internal approval through the provost office and external approval from ABOR. New program proposals seeking establishment at ASU will need approval from three administrative bodies in the following order:

- [The Office of the University Provost at ASU](#)
- Arizona Board of Regents (ABOR)
- ASU Governance Councils

The process begins when the office of the provost notifies an academic unit that they can seek approval on a new program. The unit must submit a comprehensive proposal to gain approval including an assessment plan for the new program. UOEEE works with the academic unit to develop the assessment plan component and provides *provisional approval* for the program to move forward. Assessment plans for new programs are submitted through the “New Program Application” function of the [UOEEE Assessment Portal](#).

The provisional assessment plan required for ABOR review is submitted in an abbreviated format and does not include all the common ASU assessment elements. The provisional plan must include program learning outcomes, concepts and competencies, measures, and a measures/assessment process summary. The summary includes:

- Identified Student Artifacts: The student artifact or assignment used for data collection and what class it is coming from.
- Tool or Instrument: The type of tool or instruments being used (e.g., a rubric, survey, exam).
- Process: The steps describing how the assessment will take place.
- Continuous Improvement: A single statement that explains the data will be used for continuous improvement

The summary can be somewhat general. There’s no need to identify course numbers or subjects as you may not have those at this time, and performance criteria and rubric dimensions

or scales are not required at this time. You will submit the ABOR assessment plan in the UOEEE portal, where you may receive feedback or questions prior to approval.

Note: Graduate degrees require one of the learning outcomes to be related to the culminating experience (thesis, dissertation, applied project, etc.), and the program’s core also needs representation in the outcomes. For example, the core and/or culminating experience should be used as student artifacts, although they may be referred to as course areas or general proposed titles. (Ex. “the statistics core course” or “Statistics for Research Administrators course”)

Programs need to submit their assessment plans to UOEEE by **August 31<sup>st</sup>** in order to be reviewed and approved by ABOR within that calendar year. Undergraduate and graduate certificates do not go to ABOR for approval but are still required to have their assessment plan (as part of their proposal materials) approved by UOEEE after ASU’s Provost Office approval but before Governance Council submission.

**Provisional approval of the assessment plan signifies readiness to go to ABOR but not entirely complete for full UOEEE approval.**

After ABOR approval but before governance approval programs must resubmit their assessment plans to UOEEE for full approval. This full approval ensures all changes that occurred during the ABOR approval process are included in the plan and current curriculum is reflected. Additional information for new programs can be found in [Canvas](#).



## Academic Program Review (APR)

Academic Program Review occurs on a seven-year cycle; programs can check when their college or department is scheduled for APR on the University Program Review and Accreditation (UPRA) [APR page](#). APR is a designated time for programs to re-evaluate their assessment plan and have it reapproved by UOEEE. Assessment plan approval is provided by UOEEE and occurs alongside APR but it is not a requirement for APR. During a program’s APR process, programs have the opportunity to examine how effectively their program is meeting its mission, goals, and outcomes. Programs are also expected to use this opportunity to ensure that their assessment plans meet the most up-to-date requirements from ABOR. The University Program Review and Accreditation (UPRA) office oversees APR and has a [web page](#) with timelines, guides, and other important information. UOEEE is involved with two aspects: a. submission of a reflective essay on the last seven years of annual assessment report data (part

of the APR process) and b. submission and approval of a revised assessment plan (occurs at the same time but outside of the APR process).

#### **a. Reflective Essay**

As part of an assessment of program learning outcomes, units will write a reflection of their past seven years of assessment reports in their APR self-study. Assessment reports are submitted, reviewed and archived in the UOEEE assessment portal. To help programs reflect on past data, UOEEE has developed a tool that will aggregate the data from past reports into one convenient table. Programs can also review completed past reports with UOEEE feedback. Both of these are available via UOEEE's assessment portal by going to the program archives (for instructions see [Program Archives](#) in Canvas).

UOEEE has included the following reflective prompts in the APR Manual to help guide programs with completing this section of the self-study.

1. Please discuss the results of your quantitative and qualitative assessment data for each outcome and measure.
2. Are your students achieving at the levels of performance you had expected? How well did they meet your performance criteria?
3. What plans do you have in place for students who are not achieving the desired level of performance?
4. What actions have you taken, or will you take based on your assessment data?
5. Describe how the results have been shared with program faculty and students.

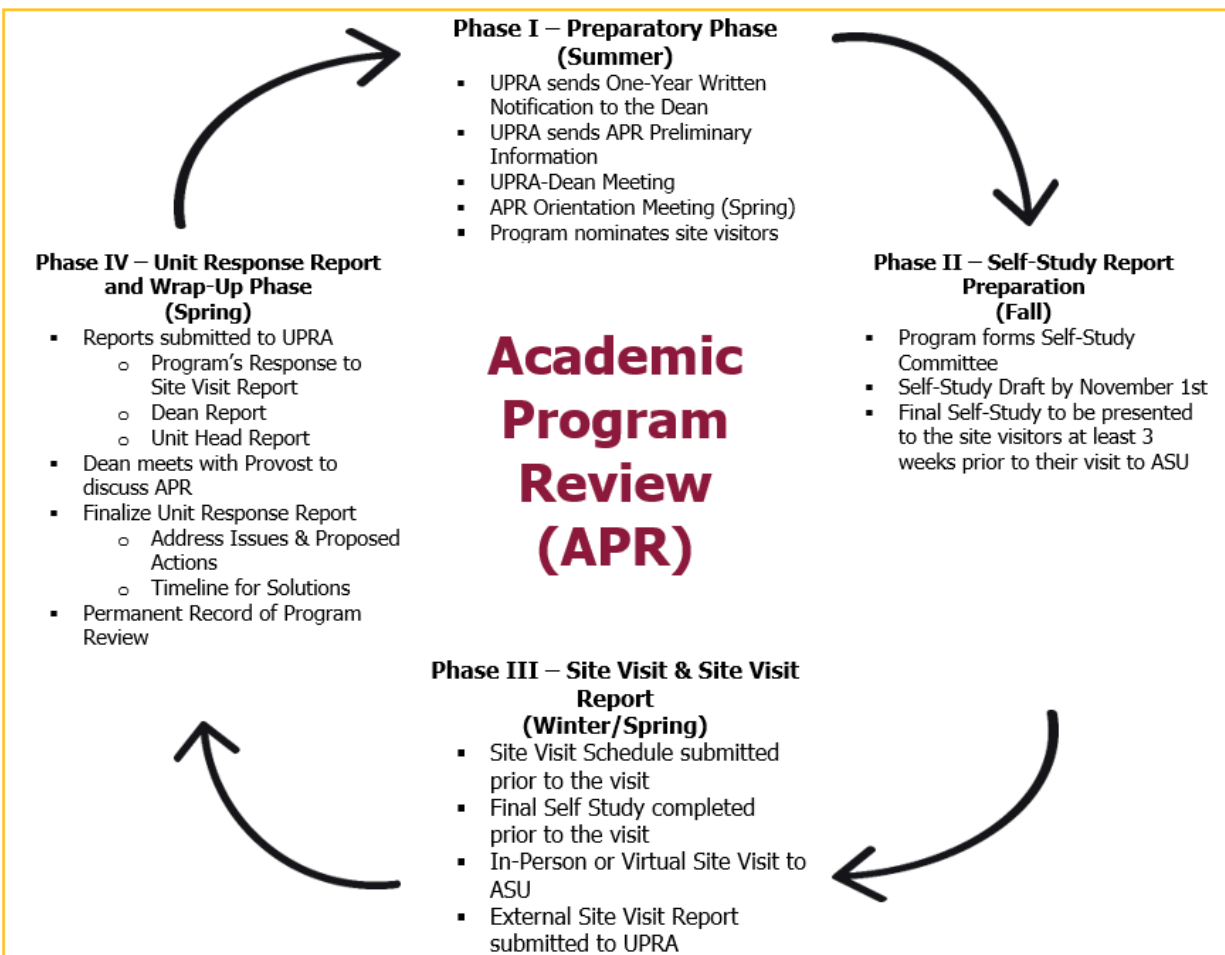
#### **b. Approval of a Revised Assessment Plan**

Programs must receive UOEEE approval of their assessment plan (through the assessment portal) during the APR process. This approval requires that programs incorporate the most up-to-date assessment standards and requirements put forth by UOEEE into their assessment plan. To accommodate the APR timeline, programs are expected to submit a first draft of their updated assessment plan by August 31st. To receive UOEEE approval, programs must review their assessment plan and incorporate all of the changes that have occurred over the past seven years including all ABOR elements that are currently required, even if they were not a requirement when the assessment plan was first established. Programs should also consider making changes in preparation for the next seven years of assessment and the focus of what they would like to know about their curriculum and their student's learning. Changes may be made based on insight that arises from the previously collected longitudinal data, staffing changes, and/or curricular changes. Most programs also have more than three outcomes and should identify the three they would like to assess during the next assessment cycle. During APR, programs may choose to assess different outcomes or revise the current outcomes they have. UOEEE will assist programs in updating their assessment plan if requested.

For programs preparing to go through APR, [a short video](#) has been prepared to explain how to update an assessment plan and also how to respond to the prompts in the APR Manual.

It should be noted that programs going through the APR process, will have a choice to pass on completing an annual assessment report for the year they are preparing the APR report or the following year since their assessment plan will be newly developed and may require time for implementation. For example, a program going through APR in the academic year 2024-2025, will not need to collect data during the 2024-2025 academic year and as a result they will not need to submit a report based upon that data, in the fall of 2025. They will begin to collect data with the new assessment plan the following year and submit the next report in the summer/fall of 2026.

*\*The academic year runs from August to July annually*



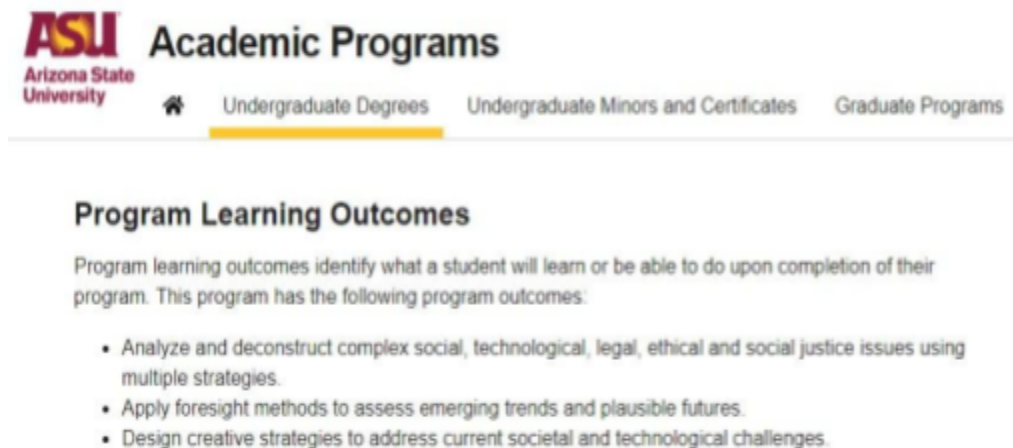
## Program Learning Outcomes Published in Degree Search

It should be noted that a program's learning outcomes (PLOs) will be made public via [ASU's Degree Search](#) site (see Figure 3) following the completion of a program's APR. In addition, all assessment materials, including assessment plans and reports, could be reviewed by accrediting bodies and other external stakeholders. As such, programs need to be aware of these audiences when writing a new program assessment plan and provide detailed descriptions that leave readers with a strong understanding of what each element in the plan is intended to achieve. Well-developed plans give decision-makers confidence to support the program. For additional information about the university process for establishing new programs, please visit the provost office's web page on [curriculum development](#).

Note: Certificates do not require ABOR approval, yet the HLC requires all credit-bearing programs, degrees, and certificates to follow assessment practices and requirements. UOEEE does not currently assess minors.

**Figure 3**

*Program Learning Outcomes as Shown on ASU's Degree Search Site*



The screenshot shows the ASU Academic Programs website. The ASU logo is on the left, followed by the text "Academic Programs". Below this is a navigation menu with four items: "Undergraduate Degrees" (highlighted with a yellow bar), "Undergraduate Minors and Certificates", and "Graduate Programs". Below the navigation menu is a section titled "Program Learning Outcomes". The text below the title reads: "Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:". Below this text is a bulleted list of three outcomes:

- Analyze and deconstruct complex social, technological, legal, ethical and social justice issues using multiple strategies.
- Apply foresight methods to assess emerging trends and plausible futures.
- Design creative strategies to address current societal and technological challenges.

## Program Disestablishment

Programs found within UOEEE's assessment portal are annually pulled from ASU's Institutional Analysis official records of established programs. Given this, the primary means of officially removing a program from UOEEE's assessment portal is to complete ASU's disestablishment process. The disestablishment process can be initiated via the academic plan process within the [Kuali Curriculum Management System](#). For more information about the process, please visit the Office of the University Provost's [web page](#). Assessment plans are developed when a program first applies for "new program" status.

## Elements of a Program Assessment Plan at ASU

Programs are expected to follow the most up-to-date requirements at the time of submission. The assessment delegate works with UOEEE to ensure plans are consistently evaluated and revised as needed. As new elements are added, established programs will not be required to complete until the Academic Program Review cycle. At that time, they must revise their plan to include all current requirements.

Below is a table of current (2024) program elements that are required for new programs and 2024-2025 APR programs and brief descriptions of each plan element are included. Additional resources for each element can be found on the [UOEEE Canvas site](#).

Existing Programs	New Programs*	APR Programs*	ASU University Office of Evaluation and Educational Effectiveness	APR Certificates*	New Certificates*	Existing Certificates
	•	•	Mission	•	•	
	•	•	Goals	•	•	
≥ 2	≥ 3	≥ 3	Program Learning Outcomes	≥ 2	≥ 2	≥ 2
	•	•	Concepts	•	•	
	•	•	Competencies	•	•	
	•	•	Curriculum Mapping			
	•	•	Assessment Process	•	•	
•	•	•	Measures (Minimum of two per outcome)	•	•	•
	•	•	Indirect Measure of Student Learning** (Minimum of one per plan)			
	•		Measures Summary†		•	
•	•	•	Performance Criteria	•	•	•
•	•	•	State Compliance Questions	•	•	•

\*Programs and certificates that have gone through the APR process in AY 20-21 or later or any program that submitted a new program application to UOEEE in AY 20-21 or later.  
\*\* Can be counted towards the two measure minimum per outcome  
† Programs and certificates seeking establishment will need to complete the "Measures Summary" element on their application for ABOR approval. This element will not appear after a program is established.

1. **Mission Statement:** The program's mission statement should contain three components: the purpose and value of the program, how it serves students, and how it supports the university mission. When taken together, the statement also serves as a reference point for program goals and should show a conceptual tie between the goals and PLOs.
2. **Program Goals:** Program goals are broad statements that explain what the program expects of all their students. It extends the mission statement and can explain the expectations of the curriculum and operationalize the mission statement. Goals define what makes the program unique as well as how they support the university mission.

3. **Program Learning Outcomes:** PLOs measure specific knowledge and skills students acquire upon completing a degree. Outcomes are written in measurable terms and are focused on student learning. Each PLO has its own set of concepts and competencies.
4. **Concepts:** Concepts are the content areas students need to understand to achieve an outcome and are directly related to the curriculum. Given this, program syllabi and course descriptions are a good place to start when developing concepts. The number of concepts in a higher education program can be abundant, yet not all need to be included in an assessment plan. Concepts can be thought of as “what students should know.”
5. **Competencies:** Competencies are measurable components of the learning outcome. Competencies are assessed using measures and predetermined performance criteria. While concepts are knowledge areas, competencies are measurable components of the learning outcome. Competencies can be thought of as “what students should be able to do.”
6. **Assessment Mapping:** Assessment mapping is a visual representation of the relationship between the PLOs and the program’s courses/curriculum. Mapping identifies where PLOs are introduced, reinforced, and mastered.
7. **Assessment Process:** This element provides a road map or steps on how the program outcome will be measured. A detailed process allows for future replication providing a level of validity. Details that should be included in the process are:
  - a) A description of the **population** used for the data collection. example: students in the major.
  - b) Describe each measure formally and in detail. Example: Measure One will use the students final capstone project measured with a 5 point rubric....
    - Include the **artifact** (name of the assignment, i.e., research paper, capstone project, etc.) being used and
    - the performance indicator for the outcome
    - as well as the course it will be collected from
    - and type of **research instruments** being used to evaluate the artifact (i.e., a rubric, scale, survey).
  - c) Data **process** describing how the data will be collected, aggregated, analyzed, and reported. This should include enough details for it to be replicated.
  - d) **Time frame** in which the data will be collected and analyzed (i.e., a semester or academic year).
  - e) **Research team** or faculty participating.
  - f) How the data will be organized and **analyzed**.
  - g) How the data will be used for **continuous improvement**.
8. **Measures:** Measures refer to the tools used for assessment. UOEEE recommends using rubrics as direct measures of student learning when possible and now requires at least one indirect measure (such as surveys or focus groups) per assessment plan to support the analysis. The course and the name of the student artifact should be included. Consistency in writing measures helps external readers understand what is being measured. We suggest Naming the Course number and name, the assignment or artifact, the measurement tool.

9. **Performance Criteria:** This element is a projection of the proportion of students that are expected to obtain a defined level of knowledge and performance. This criterion is usually established by the faculty (although some disciplines have national performance standards) and confirmed through longitudinal data collection.

## Mission Statement

[Canvas Link](#)

A program level mission statement should explain the purpose and values of the program, as well as, demonstrate the way it serves students. The mission statement is intended to provide a reference point for other elements of a program’s assessment plan including its goals and program learning outcomes.

When writing a program mission statement, programs should also develop some point of alignment with the [university mission statement and goals](#) (see Figure 4). The university mission, or charter, explains the purpose, values, and intentions of the institution. It serves as the foundation upon which its educational programs are based. Accreditors will evaluate how well an institution executes its mission through its academic programs and other endeavors.

**Figure 4**



Guiding questions for program mission statement development:

1. Does it explain the **purpose and values** of the program?
2. How does the program **serve students** specific to the discipline?
3. Is there a relationship between the **university mission** and the program mission statement?

4. Do the **program goals and the program learning outcomes** directly relate to the mission statement?

### **Example Mission Statement with Breakdown of Components**

The ASU School of Community Resources and Development advances the social, economic, environmental and cultural well-being of our local and global communities through instruction, research and service. We provide nationally recognized interdisciplinary research expertise and innovative academic programs in nonprofit leadership and management, parks and recreation management and tourism development management.

## **Program Goals**

[Canvas Link](#)

Program goals are broad statements that extend and operationalize the mission statement. They define what makes the program unique as well as identify programmatic alignment with the university mission. Program goals should also be able to describe what skills and knowledge the program expects all students to achieve. The number of program goals is often between three and six per program.

### **Examples of Program Goals**

- The goal of ASU Program X is to teach students how to build community.
- Students enrolled in ASU Program X will generate new knowledge through a broad array of scholarly, research and creative endeavors.
- ASU program X provides students with a foundation for dealing with the immediate and long-range needs of society.
- ASU Program X teaches students cultural understanding through study of social, political, economic, and technological change.
- ASU Program X prepares students for employment in multiple settings to address the needs of people with communication, speech, language, literacy, and swallowing difficulties.
- The certificate in X aims for students to understand and use formal or programming systems, and how such systems can be used to understand, address, or model issues in human cognition.

## Program Learning Outcomes

[Canvas Link](#)

Program Learning Outcomes (PLOs) identify what a student will learn or be able to do upon completion of the program. They typically are measured using direct course-based artifacts (e.g. student assignments) and tools (e.g., faculty developed rubrics).

Programs are encouraged to develop as many program learning outcomes as necessary to reflect the curriculum, create accurate program findings and support a faculty-driven culture of continuous improvement. UOEEE requires programs to choose at least three outcomes to assess through the assessment plan each year. For reference, most programs tend to have between four and six PLOs. Certificates can similarly have as many outcomes as necessary to create accurate program findings but are required to assess a minimum of two outcomes each year. Keep in mind, each program learning outcome is required to have at least two related measures (covered in a later section). For degree programs, this minimally produces just six data points (three outcomes with two measures each) from which to assess often complex degree programs and four data points for certificate programs.

### Considerations When Developing Program Learning Outcomes

It is important to remember that outcomes should be measurable indicators of a student's progress towards achieving the program's stated goals and related mission and the assessment plan should demonstrate alignment across the elements. For example, if a program's goals relate to training graduates to have a positive impact in one's community, the program's assessment plan would best be served with the inclusion of an outcome addressing skills or knowledge related to community development. NOTE: Each program goal does not need to be reflected in the learning outcomes, but external evaluators should be able to perceive overall alignment between the three elements (i.e., mission, goal, and outcomes) without much difficulty.

It is also vital to measure the correct level of student learning in the student learning outcome. Outcomes should be rigorous and reflect the highest level of learning expected for degree attainment. For examples and suggestions on appropriate wording for each level of student learning, please reference Bloom's Taxonomy of Action Verbs (Figure 5). A good rule of thumb is that PLOs for lower-level undergraduate courses should be at the Bloom Taxonomy level of "remembering" and "understanding," outcomes associated with upper level undergraduate courses should be at the level of "applying" and "analyzing," and graduate level students should be at the level of "evaluating" and "creating." Most undergraduate programs will utilize verbs at the "applying" and "analyzing" levels for their outcomes as programs often focus on students' knowledge at the completion of their undergraduate degree. Keep the outcome specific; don't try to include too much in one outcome as broad outcomes are difficult to measure with any accuracy.

*Bloom's Revised Taxonomy Action Verbs*

Remembering		Understanding		Applying		Analyzing		Evaluating		Creating
To find or recall information		To construct meaning from written material or graphics.		To use information in new situations.		To draw connections among ideas.		Judging the value of information or ideas		To produce new or original work.
Define	Recall	Associate	Explain	Calculate	Organize	Attribute	Inspect	Appraise	Justify	Assemble
Draw	Recognize	Classify	Identify	Change	Plot	Break Down	Integrate	Argue	Measure	Compose
Duplicate	Select	Clarify	Illustrate	Classify	Practice	Categorize	Outline	Assess	Rank	Construct
Identify	Show	Compare	Indicate	Compile	Present	Combine	Parse	Check	Rate	Create
Label	State	Comprehend	Infer	Compute	Produce	Connect	Predict	Conclude	Recommend	Design
List		Contrast	Interpret	Employ	Respond	Contrast	Research	Convince	Reflect	Develop
Match		Demonstrate	Relate	Execute	Show	Debate	Select	Critique	Score	Direct
Name		Describe	Represent	Implement	Solve	Deconstruct	Separate	Estimate	Support	Formulate
Outline		Differentiate	Restate	Map	Use	Differentiate	Simplify	Evaluate	Select	Generate
		Discuss	Select	Model	Write	Distinguish	Subdivide	Determine	Support	Plan
		Distinguish	Summarize	Modify		Examine		Detect	Test	Produce
		Estimate	Translate			Experiment		Investigate		Propose
						Illustrate		Judge		Synthesize
										Revise
										Rewrite
										Write

**How to Write Program Learning Outcomes and Examples**

After PLO content areas have been conceptually developed, programs can begin constructing PLO wording. When writing PLOs pay particular attention to appropriate level of specificity and academic rigor, UOEEE recommends that programs develop PLO wording using the following process:

Students will \_\_\_\_\_

1. Identify and insert an appropriate action verb describing the level of student learning by using Bloom's Taxonomy (e.g., demonstrate, recall, apply, synthesize, create, etc.)
2. Identify what students will know or be able to do (the knowledge you will measure) as a result of learning or completing a curriculum
3. Identify the student product that will be used to evaluate student learning

Below are some examples of well written PLOs from several different fields with a breakdown of each component including the specific **action verb**, the **knowledge area** being measured and the **student product**.

## General

1. Demonstrate both an **understanding** and the practical **application** of the ethical standards implicit in science, such as appropriate attribution of ideas, good recordkeeping, and truthful presentation of data and conclusions when conducting research.
2. **Explain** and appropriately **apply** evolutionary theory to human and nonhuman primate biological phenomena in midterm exam
3. **Write** focused, analytical essays in clear, grammatical prose to a critical essay's thesis
4. **Employ** primary and/or secondary sources, with proper acknowledgment and citation, as they contribute to a critical essay's thesis

## Science

1. **Understand** the objective of their chemical experiments, properly **carry out** the experiments, and appropriately **record and analyze** the results.
2. **Know** and **follow** the proper procedures and regulations for safe handling and use of chemicals (in laboratory procedures).

## Humanities

1. The ability to **apply** creative approaches to problem-solving and self-directed study.
2. **Analyze** quantitative data to draw reasonable conclusions.
3. **Identify** examples of symbolism in short stories and **incorporate** symbolism in their own writing.
4. **Analyze** how American foreign policy history relates to current trends in American foreign policy papers.

## Theater

1. **Demonstrate** a wide understanding of theatre practice and its varied components within the areas of acting, directing, playwriting, design and drama literature.
2. **Articulate** an understanding of the connection between historical periods within theatre, art, culture and society.
3. **Demonstrate** the ability to take on a leadership role in a rehearsal and performance process through the successful completion of a production experience.

## Engineering

1. **Identify, formulate, and solve** complex engineering problems by applying principles of engineering, science, and mathematics.

2. **Function** effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

## Writing/English

1. **Participate** in critical conversations to prepare, organize, and deliver their work in public presentation.
2. **Practice** a deliberate writing process with emphasis on inquiry, audience, research, and revision.
3. **Analyze** literary texts and **recognize** literary terms and features in these texts.
4. **Develop** interpretive arguments both in writing and discussion.
5. **Apply** a variety of genres or adapt genres to suit different audiences and purposes.

## Concepts and Competencies

Each program learning outcome must include associated concepts and competencies.

### Concepts

[Canvas Link](#)

Concepts are high-level descriptions of the theories, ideas, paradigms, and understandings that students need to know and acquire during the program to successfully execute the outcome. These theories, ideas, paradigms, and understandings can come from a given profession or field of study that students will draw upon in the successful execution of the outcome. Within the assessment plan, programs can simply list out the concepts needed for students to be successful. The number of concepts in a higher education program can be abundant, yet not all need to be included in an assessment plan. Ex. of Concepts: Chemistry, Physics, theory of relativity, theory of gravity, elements, theories on leadership, critical thinking, ethics.

### Competencies

[Canvas Link](#)

Competencies are directly related to PLOs: they break outcomes into measurable parts. Each PLO has its own set of concepts and competencies. Competencies are the skills, tools, and operational knowledge students need to be able to achieve and successfully execute the outcome. Most competencies are summative in nature and are written for students to be able to achieve upon program completion. A good rule of thumb is that competencies resemble how rubric dimensions break down an outcome into measurable components. For example, the outcome for an accounting program is often to evaluate financial risk for clients. Competencies for such a program would include the ability to assess, analyze, and manage risk using appropriate frameworks. On the other hand,

concepts students would master include business law, ethics, process analysis and design, principles of auditing, and monetary unit assumptions.

Competencies differ from general education in that they are unique to a specific program or field, while general education skills are transferable across disciplines. Another differentiating feature is that competencies have measures to determine the degree of learning and performance criteria to establish exact expectations.

Similar to concepts, the number of competencies taught in a higher education program can be abundant, yet not all need to be included in an assessment plan. Programs need to identify the skills and operational knowledge that are summative in nature; in other words, which skills are built from knowing other skills.

## Curriculum Mapping (IRMA)

Curriculum mapping is a visual representation of the relationship between the PLOs and the program's courses/curriculum. Mapping identifies where PLOs are introduced, reinforced, and mastered, and can be very basic or complex. One particular benefit of assessment mapping is clarity of purpose. Mapping and measuring the development of specific competencies throughout the curriculum allows program leaders, faculty, and administrators to take an objective look at the PLOs (not just to succeed on any one assignment but to ensure the development of long-term skills over the course a student's academic career) and help to articulate what students are expected to learn through the program. NOTE: Certificate programs are exempt from this requirement.

UOEEE recommends using the following process:

1. Examine the PLOs and determine where in the curriculum (which courses) they are introduced, reinforced or developed, and mastered. Most assessment occurs at the point of mastery.
2. Work with faculty in the program and determine assignments that would provide opportunities to measure a students' knowledge and ability to demonstrate achievement of the outcome.
3. Create an IRMA map to identify when and where each program outcome is Introduced, Reinforced, Mastered, and Assessed through the core curriculum courses in the program.

**Introduced** – Students are not expected to be inherently familiar with the content or skill at the collegiate or graduate level. Instruction and learning activities focus on basic knowledge, skills, and/or competencies, and entry level complexity.

**Reinforced** – Students are expected to possess a strong foundation in the knowledge, skill, or competency at the collegiate or graduate level. Instructional and learning activities continue to build upon previous competencies and increased complexity.

**Mastery** – Students are expected to possess a mastery level of knowledge, skill, or competency at the collegiate or graduate level. Instructional and learning activities continue to build upon previous competencies and increased complexity.

**Assess** – Artifacts chosen in an assessment cycle to demonstrate students’ learning outcomes. Note: There is not a separate line within the portal’s mapping element for “assess.” Rather, the artifact and the course in which it is measured will be indicated in writing the “measure” element.

### Example of a Curriculum (IRMA) Map

Course	PLO 1	PLO 2	PLO 3
SOC 101	I		I
SOC 102	I		
SOC 110		I	
SOC 113		I	
SOC 205			R
SOC 210		R	
SOC 250	R	R	
SOC 305			R
SOC 404	M	M (A)	
SOC 470	M (A)		M
SOC 485			M (A)

## Assessment Process

[Canvas Link](#)

The assessment process should describe the approach or method developed to measure the PLOs. The assessment process can be broken down into categories or written in a narrative. A detailed process allows for future replication providing a level of validity. Details that should be included in the process are:

1. A description of the population used for the data collection. Example: students in the major or students in their last semester or from a specific campus participated in this assessment.

2. Describe each measure completely: Course name and number, student assignment, tool for measurement. Example: Measure One will occur in Course X using the students final capstone project measured with a 5 point rubric....
3. Include a description of the artifact (i.e., research paper, capstone project, etc.) being used and the performance indicator for the outcome.
4. Data process describing how the data will be collected, aggregated, analyzed, and reported. This should include enough details for it to be replicated.
5. Time frame in which the data will be collected and analyzed (i.e., a semester or academic year).
6. Staff and faculty participating in assessment planning and data collection procedures.
7. How the data will be organized and analyzed.
8. How the data will be used for continuous improvement.

If a program is designed to lead to a professional certification or carries a specialized accreditation, this information should be included in the assessment process area. As previously mentioned, it is important that the assessment process be as descriptive and robust as possible as program plans are accessible by university administration, accrediting bodies, and are available upon request to all stakeholders, journalists, and the public. The validity of the data reported is often based largely upon the process by which the data was collected. A thoroughly descriptive assessment process allows for replication as well as the proper context in which to interpret the data.

Lastly, a program's assessment process will align with other elements of the assessment plan much like concepts and competencies. As such, a well-developed assessment process will aid programs in identifying appropriate "measures" along with their "performance criterion."

## Measures

[Canvas Link](#)

Measures are the tools or instruments used to score students' work. The measure element should minimally include three pieces of information: (1) Name of the course and course number (e.g., PSY 101, Intro to Psychology), (2) the artifact being measured (e.g., capstone project, final paper, etc.), (3) the measurement tool being used to make a judgment concerning demonstrable student and graduate abilities (e.g., a faculty developed rubric, a survey, an exam). The measure works in tandem with the performance criteria identifying the expected level of performance. Most of this information is also included in the assessment process but in much more detail and specificity. Both programs and certificates will be required to have at least two measures per outcome.

The example below reflects UOEEE's recommended format:

PSY 101: Intro to Psychology, the student assignment will be a Final Paper measured with a faculty developed rubric.

## Direct and Indirect Measures

Both direct and indirect data are important for evaluating program quality. Direct measures collect data on student learning directly related to knowledge and academic performance as assessed through a program's learning outcomes. Indirect measures can provide information on attitudes, experiences, and perceptions from stakeholders that can help support and explain findings taken from direct assessment data. *Each assessment plan is required to have at least one direct measure of student learning per outcome and one indirect measure of student learning per assessment plan.*

Grades in courses or for exams are not recommended as a direct measure. The reason is that they only provide one dimension of learning, correct or incorrect or how many points have been earned rather than where the student's strengths and weaknesses lie in their knowledge. If an exam or final grade is used, programs must include how adequate information can be found that specifically addresses student progress towards the related outcome. Including details regarding the number of items used, and examples of the exam items is helpful. This rationale should be included in the assessment process element within the same outcome. One commonly approved use of exams is to identify and report on a subset of exam items that specifically relate to the assessment outcome.

Rubrics, either faculty-developed or externally validated, are recommended, and preferred for use wherever circumstances allow. Rubrics are preferred over grades (i.e., class and exam grades) since they provide a breakdown of the content and the level of knowledge learned as well as identify trends in the different areas of knowledge. Rubrics or score cards can be paired with a number of student artifacts including class assignments, research papers, capstone projects, performances, laboratory activities, or clinical examinations.

Indirect measures assess students' perceptions and attitudes and can often help explain results obtained from direct assessments. Indirect data is often collected as qualitative or survey type data and can be collected from multiple populations including current/graduating students, alumni, faculty, and employers. Indirect data can be collected in many ways including focus groups or interviews where faculty or students can provide feedback and insight to a program's curriculum or reflective essays asking where and how students learned specific information.

One relatively lesser known aspect of the UOEEE website is the availability of UOEEE collected survey data. UOEEE's Surveys and Systems team is tasked with designing and conducting original survey research for administrative planning, decision making, policy development, accreditation, and official reporting. This directive has led to the creation and implementation of various annual surveys that sample multiple populations (e.g., incoming freshmen, transfer students, graduating undergraduate students, and graduating graduate students among others) whose results are regularly provided to ABOR, HLC, and the Arizona State Legislature among other organizations. These survey results are also available internally to all ASU programs (making it an excellent source of indirect data for program assessment) and can be disaggregated at the college, department, and program levels. Users with access to the portal can learn more about the different surveys available and access their results by visiting the [survey reporting page](#) on the UOEEE website.

Other data such as employment rates, passage rates on professional licensure and certifications can be used if directly relevant to the outcome. UOEEE recommends that

programs use information already being collected for accreditors and regulators in their program assessment plan when possible. Accreditation goals and outcomes can also be used assuming they are sufficiently summative and cumulative in nature.

### **Formative and Summative Measures**

Including both formative and summative measures within a program's assessment plan can provide a richer and fuller view of student learning over their long term experience. Formative and summative measures differ in when student learning is assessed.

Formative measures are assessments that occur during the learning process to monitor student progress and help identify instructional areas where continuous improvements can be focused. At ASU, bachelor programs can begin assessing students during the students' 200 and 300 level courses if it is important to measure learning gained while progressing through the program. This can then be followed up with assessments later on in the program up until the point of graduation. Not all students in the program are expected to be assessed but a representative sample should be planned for so it provides reliable and accurate assessment results.

Summative measures are assessments that occur at the point of mastery, often as students graduate from the degree program. They provide insight into a program's bottom line, assessing whether students have achieved the learning outcomes. Data collection after graduation also provides summative data. This data can include licensure exam scores, certification numbers, and student surveys asking students for insight on how well prepared they felt they were entering the workforce. The majority of measures used for assessment at ASU are the summative type.

### **Examples of Measures**

#### **Direct**

1. INR 301: Empirical Political Inquiry, a research design assignment will be assessed using a rubric.

Performance Criterion: 75% of students will earn a score of competent, good, or excellent on the research design assignment rubric.

2. BST 601 Biostatistical Theory and Inference Final Project to be assessed via a faculty-developed rubric.

Performance Criterion: At least 80% of the students will meet (rating: 4) or exceed (rating: 5) expectations on the final project using a faculty-developed rubric.

#### **Indirect**

1. Students surveyed at graduation (Graduating Senior Report Card) will evaluate the quality of "thinking critically and analytically" on this survey item.

Performance Criterion: 75% or more of students surveyed with the Program Senior Survey will rate their preparation at a level of "Quite a Bit" or "Very Much."

## Performance Criteria

[Canvas Link](#)

While measures identify the student artifact and tool that will be used to “measure” the outcome, the performance criteria establish the expected level of performance and the proportion of students expected to meet that level of performance. This level of expected performance can be based on longitudinal data, such as past performance or nationally established criteria where available. When not available, performance criteria can be determined by the faculty based on their expertise in the field and then reinforced through longitudinal data collection.

### Challenging Criteria

Most performance criteria expect 70% to 80% of students to attain a set level of proficiency for a measure to be considered met during reporting. Performance criteria differs from grading in this aspect. Quite often, criteria are met by a disproportionately high number of students being assessed because performance criteria have not been researched to determine which levels would be challenging to attain. If 100% of students meet a program’s criteria in all dimensions of a rubric, then the tool is not sensitive enough or the criteria is too low to be informative. Programs learn the most about their curriculum when they set criteria just above average performance, where more than half, but not all students can be expected to achieve it. Criteria are considered challenging when there is a realistic chance it may not be met by students and graduates. This delicate balance requires faculty to continuously consider quality improvements. This would then provide information on both the strengths and weaknesses of the curriculum.

Because ASU wants criteria to be effective, challenging, and informative, UOEEE does not reward nor penalize programs for meeting or not meeting their learning outcomes within a given year. Outcomes not met are viewed as important data points and opportunities for improvement. Plans are considered effective if they can provide valuable information for making continuous instructional improvements.

### Utilizing Rubrics

As previously mentioned, UOEEE recommends programs use rubrics to assess student performance. When developing rubrics, faculty should first consider the rubric’s dimensions, the student population, and the number of students expected to attain “mastery” of a subject, skill, or intellectual habit. Performance criteria can change for students as they progress through a degree. Programs may also choose to use a single rubric at all levels of measurement. For example, programs may use a rubric in which sophomore students are likely to earn a 2 out of 4 on some or all dimensions, but then score a 3 out of 4 as they are reassessed with the same rubric as junior or seniors. The number of levels should be enough that each level sufficiently describes the spectrum of student performances for that assignment.

UOEEE recommends that programs utilize rubrics with four levels (1-4) with faculty calibrating their rubrics so that a majority of students, or an “average” student, would achieve a rating of 3 out of 4, with 4 being reserved for the exceptional student. Regardless of the number of levels chosen, UOEEE recommends the inclusion of a “NA” rating to

represent the absence of material or the absence of relevant work submitted as opposed to a “1” rating which signifies an attempt that failed to demonstrate the expected level of mastery. Additional information on rubrics can be found in [Canvas](#).

### Example Rubric

Level of Accomplishment: number scale	Outstanding (Above Average)  OPTIONAL	Meets Expectation  (Average Performance Level)	Approaching Expectation	Not Yet Approaching Expectation	Information not Present
	4	3	2	1	NA
Level of Accomplishment: narrative scale	Met the expectation but also extremely well done	*50-70% of Students should score here	(Promising, but not quite there)	Student made an attempt but product does not correctly satisfy expectations	This could be due to the responder or poor fit of the assignment
Dimension 1	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)
Dimension 2	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)
Dimension 3	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)
Dimension 4	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)	(Dimension Description)

\*The 50 to 70% is an example. Rubric developers can establish an appropriate performance criteria that meets their departments' needs.

## Annual Program Assessment Plan Reviews

Assessment plans go through a formal review and revision every 7 years at the time the program is undergoing academic program review. But for smaller revisions and minor changes programs review their assessment plan each year and can submit changes to their delegates at any time during the cycle. This occurs in one of two ways:

- Programs not making any changes to their assessment plan from the previous year, are expected to mark their assessment plan as “continuing” by December 2<sup>nd</sup>. No further review or action is required for these plans (this option is not available for programs going through APR).
- Programs making additions or changes to their assessment plan will need to submit these changes to their delegates for approval. We recommend allowing enough time for

the delegate to review the edits, request revisions (if necessary), and receive approval by December 2<sup>nd</sup>.

Programs can request feedback from UOEEE on their assessment plans at any point in the process. This feedback request should be factored into the program's assessment plan submission timeline. To guide the submission of assessment plans, UOEEE has developed a rubric (below) to help programs understand what information should be included in each element of a program's assessment plan. When revising assessment plans during APR the rubric can be found in the portal alongside the assessment plan. UOEEE will score the rubric as a guide to help you develop your assessment plan. The rubric should be used as a guide, formative feedback, not a score. When each element of the plan meets expectations it is considered acceptable for submission at ASU.

### Assessment Plan Rubric

Element	Excellent (3)	Meets Expectations (2)	Revisions (1)
<b>Overall Assessment Plan</b>	No Revisions, Strong	No Revisions The overall expectation for an assessment plan is that there is a mission and goals that explain the purpose of the program and how it serves the students as well as support the university mission. Outcomes	Necessary Revisions, See comments
<b>Mission</b>	Includes all three components.  Exceptionally well-articulated mission. The reader understands the uniqueness of the program	Includes  1. Purpose and values of your program 2. How you serve students 3. Alignment with the university mission.	<ul style="list-style-type: none"> <li>Needs to explain the purpose of the program.</li> <li>Needs to explain how it is an academic program and serves students.</li> <li>Need a statement about how the program mission supports the University mission (i.e. Community good, innovation, research, academic excellence, diversity).</li> <li>Other, see comment.</li> </ul>
<b>Goals</b>	Goals align perfectly with the mission statement and program learning outcomes. They describe what is expected from all students in the program. As a group they are comprehensive.	Goals expand on the mission statement. They describe what the program expects all students to achieve. There is alignment between the goals and mission and outcomes. Goals include skills and knowledge students must be able to demonstrate to be academically successful in the program?	<ul style="list-style-type: none"> <li>The goals need to be revised so they align with the mission</li> <li>The goals need to be revised so they state what the program expects all students to learn or achieve.</li> <li>Other, see comment.</li> </ul>

<b>Outcomes</b>	Outcomes are specific to the program/field (vs. broad general outcomes that could fit multiple programs such as general communication skills). The outcomes match the level of rigor expected for the degree through the verbs used for measuring learning. Outcomes lend themselves to multimodal assessment. Outcomes have been vetted by all stakeholders including faculty and students.	<p>Program Learning outcomes are observable and measurable achievement of knowledge acquired from participating in an academic program.</p> <p>Outcomes reflect the level of learning and rigor expected for the degree being issued.</p>	<ul style="list-style-type: none"> <li>• Outcome needs to be revised so that it is more specific, it is too vague.</li> <li>• Narrow the focus of the outcome, the content of the outcome is too large (two measures would never provide enough data).</li> <li>• The outcome needs to be written in measurable terms.</li> <li>• Revise and use one verb in the outcome. The outcome uses more than one verb which will skew results and have multiple meanings.</li> <li>• Revise and only have one area that will be measured. The outcome has too many items to be measured (double and triple barreled).</li> <li>• Use a higher-level verb. The outcome uses a level of verb that does not match the rigor of the level of degree.</li> <li>• Other, see comment.</li> </ul>
-----------------	--	---	--

<b>Concepts</b>	The concepts present a disciplinary overview of the areas of knowledge that will be learned in order to accomplish this outcome.	Lists relevant knowledge areas, theories or skills needed to be acquired to be able to achieve the outcome. This can be a list of areas.	<ul style="list-style-type: none"> <li>• Revise the concepts so they state knowledge areas (nouns) that students must acquire to meet the learning outcome</li> <li>• Add more knowledge areas so the content is comprehensive and covers the outcome.</li> <li>• Align the knowledge areas to the outcome.</li> <li>• The knowledge areas and the measures should align.</li> <li>• Other, see comment.</li> </ul>
<b>Competencies</b>	The competencies break the outcome into components that are each measurable in their own right and added together present a comprehensive evaluation of accomplishing the outcome.	The competencies break down the outcome into measurable components. Competencies explain the steps or criteria needed to successfully accomplish the outcome. Competencies can often serve as the dimensions of your rubric.	<ul style="list-style-type: none"> <li>• The competencies need to break down the concepts into measurable components. The categories should all relate directly to the outcome.</li> <li>• Add more competencies. Too few competencies to appropriately break down the outcome (1 or 2).</li> <li>• The competencies need to be measurable.</li> <li>• The competencies need to align to the outcome.</li> <li>• The competencies in total need to be more comprehensive. They do not demonstrate all of the components of the outcome.</li> <li>• Other, see comment.</li> </ul>
<b>Mapping</b>	Excellent	Identify where in the curriculum outcomes are introduced, reinforced, and mastered	<ul style="list-style-type: none"> <li>• Revise, cannot use one course for all outcomes.</li> <li>• Revise courses listed in the measures are not listed in the assessment map.</li> <li>• Other, see comment.</li> </ul>

<b>Measures</b>	Uses assessment tools that measure the level of learning as well as the breadth of learning. Provides additional detail/description of the specific rubric dimension, subset of questions if using an exam, or survey question wording (if not a UOEEE exam) where applicable	Measure includes: course, assignment, tool for measurement (preferably a rubric). At least one measure is indirect data in the assessment plan. The measure aligns with the rubric.	<ul style="list-style-type: none"> <li>• Add course number and name.</li> <li>• Add the name of the assignment.</li> <li>• Add the tool for measurement such as rubric, inventory, internship evaluation.</li> <li>• Explain the measure. If it is a test it needs to explain the portion of the test that provides data for the outcome or just selected test items.</li> <li>• Align the measure with the outcome. The measure does not(or it is not apparent) align with the outcome.</li> <li>• Move this information to the assessment process. The measure includes a detailed explanation of the tool which should be in the assessment process.</li> <li>• Other, see comment.</li> </ul>
-----------------	---	---	---

<b>Performance Criteria</b>	Excellent	The Performance Criteria is the expected level of performance students achieve using the tool. Identifies expected proportion and minimum performance (rating, score, percentage, survey rating, etc.)	<ul style="list-style-type: none"> <li>• Identify the percentage of students to meet the PC</li> <li>• Identify the PC</li> <li>• Other, see comment.</li> </ul>
<b>Assessment Process</b>	Excellent	<p>The assessment process helps with validity and the ability to repeat the process. It should include a. the population you will be assessing b. explanation of each measure including the course they will be assessed in and the tool you will use (rubric), c. time frame (where students are in the curriculum)</p> <p>d. the assessment team which is the faculty that will be participating in the process, e. how you will collect and analyze the data f. how you will use the data -- share data with faculty and use data for continuous improvement of the curriculum.</p>	<ul style="list-style-type: none"> <li>• Add the student population being assessed.</li> <li>• Add description of the measures and tools.</li> <li>• Add description of process.</li> <li>• Add description of how data will be analyzed.</li> <li>• Add a description of how data will be shared (with faculty), e.g. data will be shared with faculty and used for continuous improvement of the curriculum.</li> <li>• Other, see comment.</li> </ul>

## Annual Assessment Report Process

Assessment plans explain how data will be collected annually. UOEEE recommends that programs collect assessment data throughout the academic year and then begin analysis and writing their assessment reports at the end of spring semester through to the beginning of the following fall semester. **Assessment reports are due to college assessment delegates on September 30<sup>th</sup> with final submission to UOEEE by October 30<sup>th</sup>.** This timeline allows for data interpretation, analysis, and conclusions to be developed close to the time of data collection and completed before fall teaching duties begin. Programs going through APR will have a choice to take one year off from writing assessment reports. They may choose the year they are conducting program review or the year following the APR process. Reports on

assessment findings occur each year for seven years in preparation for academic program reviews (APR). During APR programs reflect on the past results and write an essay in the self study.

Annual assessment reports must meet specific criteria and serve as records of the assessment plans in practice. In addition to student learning, annual reports record faculty and staff involvement in the overall assessment process, changes in data collection that deviate from the program's original plan, as well as programmatic takeaways following thorough analysis of the data. These reports are particularly important as they are the primary means of data collection used for evaluation and assessment of program effectiveness. To ensure consistent reporting and to avoid gaps in data, programs are expected to submit a report annually, even if no data was collected. These reports should contain an explanation for the lack of data as well as steps taken by the program to mitigate instances going forward. Programs classified as "Low Enrollment" (<20 students) are also required to submit an assessment report to offer a reflection on the status of the program and potential plans to increase enrollment but are not required to report data on learning outcomes due to the limited number of students.

Given that assessment report data is archived for programs to retrieve and use during program review, it is important for programs to try to accurately report data for the purposes of longitudinal evaluation of their students' success. Reporting on assessment activities should also be viewed as an opportunity for program faculty to reflect on their level of participation and whether assessment findings are providing information detailed enough for faculty to provide continuous improvement guidance.

Please remember that UOEEE does not reward nor penalize programs based on whether or not their outcomes were met within any given year. Outcomes not met are viewed as important data points and opportunities for improvement. Instead, UOEEE examines the process and approach taken to ensure that assessment plans provide information with the ability to inform faculty and administrators. Plans are considered effective if they can provide valuable information for making continuous instructional improvements. When UOEEE reviews annual reports each year, it focuses on four primary areas that often result in high quality data: (1) measures and data, (2) rigor of performance criteria, (3) faculty involvement, and (4) changes based on assessment findings (closing the loop). The UOEEE evaluation rubric for annual reports is included below. Annual assessment reports consist of two primary sections: the assessment changes, participation and reflection, and the outcomes reporting.

### **Assessment Report Section 1: Assessment Changes, Participation and Reflection**

Within the assessment report, the Assessment Plan Changes, Roles of Participating Faculty and Staff and Reflections on Assessment Findings is where programs have the opportunity to provide contextual information related to their program's assessment efforts over the past year. Here programs record who participated in the evaluation process, any incidents that affected the program's evaluation efforts, and lessons learned from the data within a given year. The writing prompt for each area is included below.

**Roles of Participating Faculty and Staff:** Please describe the roles and responsibilities of faculty and staff that participated in this year's assessment of student learning outcomes. Assessment participation can include writing and refining

assessment plans, overseeing the collection of data, data analysis and interpretation, and providing continuous improvement guidance to ensure students can demonstrate the development of skills and knowledge necessary for academic success within the program. Please describe the roles and responsibilities of faculty and staff that participated in this year's assessment of student learning outcomes. Assessment participation can include writing and refining assessment plans, overseeing the collection of data, data analysis and interpretation, and providing continuous improvement guidance to ensure students can demonstrate the development of skills and knowledge necessary for academic success within the program.

**Assessment Plan Changes:** Were there any changes made to the assessment plan or assessment process that made data collection different from what is in the assessment plan? If yes, what changes were made?

**Reflections on Assessment Findings:** Closing the loop. Please reflect on the findings. How does the assessment findings determine if the learning outcome is being met? How do you plan to use the data findings to make program improvements or curricular change?

## Assessment Report Section 2: Outcomes Reporting

The Outcomes Reporting component of the assessment report is where programs enter in data collected over the past academic year that is associated with their assessment plan. Programs are expected to complete each element within this section except for the contextual information, which is optional but encouraged. This contextual information is particularly helpful during program reviews, when the individual reviewing the reports is unlikely to have been the person entering in the data some years later. Components within this section include:

The screenshot displays the 'Outcomes Reporting' interface. It features a table with columns for the learning outcome, a measure, and associated data. The interface includes a 'Measure Met?' checkbox and a 'Number Collected' field. Red circles with numbers 1, 2, 3, and 4 highlight specific elements: 1 points to the 'Outcome Met?' checkbox, 2 points to the descriptive text of the outcome, 3 points to the 'Number Collected' field, and 4 points to the 'ONLINE' checkbox. The data shown is for Measure 11, EXW 542 Health Promotion: Final Examination, with 12 students collected, 11 meeting or exceeding the criteria (92%), and 8% not meeting it. The 'ONLINE' checkbox is currently unchecked.

Outcome	Measure	Number Collected	Number Met/Exceeded	Percentage Met/Exceeded	Percentage Did Not Meet	Measure Met?	ONLINE
1. Demonstrate a comprehensive understanding of health behavior change theories commonly used in public health and their application to the planning, implementation, & evaluation phases of health promotion programs.	Measure 11 EXW 542 Health Promotion: Final Examination At least 90% of Exercise and Wellness (ECXERMS) students will earn a score of 80% or higher on the EXW 542 Theory Final Examination.	12	11	92%	8%	Yes	<input type="checkbox"/>

Please disaggregate the results above for Online students specifically.

1. **Outcome/Measure Disposition:** A simple way for programs to easily indicate whether their outcomes/measures were met, not met, or unsure. As previously mentioned, UOEEE does not penalize nor reward programs for having met or not met their program learning outcomes.
2. **Contextual Information:** This space is provided to programs for contextual information to reference when reviewing past reports. These are particularly important when an outcome/measure was not met or if a program was unsure if it was met to provide reasons/insight for that particular determination.
3. **Total Number Collected/Met/Exceeded:** Where programs enter in data collected over the previous academic year. If possible, data entered into this component should be limited to students enrolled within the degree/certificate program and include **both in-person AND online students**.
4. **Online Number Collected/Met/Exceed:** A space for programs to enter in data collected ONLY from online students. This space will appear if the degree program has equal to or more than 20 of these students enrolled within their program over the academic year. A student is considered an “online” student when their registered campus is “Online” (as opposed to Tempe, Poly, etc.). This should not include data from iCourses (online courses for immersion students).

To guide the submission of assessment reports, UOEEE has developed a rubric to help programs better understand what information should be included in a program’s annual report. UOEEE has identified four primary areas that when properly completed, often results in high quality assessment data: measures and data, rigor of performance criteria, faculty involvement, and curriculum or pedagogical changes based on assessment findings. It is only when the report meets expectations as established by the assessment report rubric that it is considered acceptable for submission at ASU. If any of these elements do not meet minimum requirements, the entire report is considered unacceptable.

### Assessment Report Rubric

Report Elements	Report is Exemplary Exceptional 3	Report is Acceptable Adequate 2	Report is Unacceptable Not Adequate 1	Information Not Present 0
<b>Overall assessment plan and report</b>	Characteristics of an excellent assessment report include, but are not limited to: data (quantitative and qualitative) that provides rich information on student progress towards outcomes, multimodal assessment, detailed descriptions of faculty roles and how faculty are using the data to close the loop.	Characteristics of an overall good assessment report include, but are not limited to: data that provides adequate information on student progress towards outcomes, a valid and reliable methodology resulting in good data, detailed descriptions of faculty roles and how faculty utilized data for continuous improvement.	Characteristics of an overall poor assessment report include, but are not limited to: data that provides little to no information on student progress towards outcomes, methodology that does not provide valid or reliable data, lacks detailed descriptions of faculty roles and how faculty utilized data for continuous improvement.	

<b>Faculty</b>	Report identifies an assessment team that includes multiple faculty/staff members involved in all stages of the process. Faculty involvement aligns with the assessment plan description	Report identifies an adequate group of faculty/staff members involved in the assessment process either collecting data, analyzing, sharing or using data for improvement. Faculty involvement aligns with the assessment plan description	Report identifies the faculty that conducted the assessment but the assessment team was too small and there is no indication that the assessment was shared with relevant and multiple stakeholders. Faculty involvement does not align with the assessment plan description	Report does not specify or identify how faculty participated in the evaluative process. No evidence of faculty participation was provided
<b>Measures Adequacy</b>	Exceptional sample size collected across measures in relation to total program enrollment (e.g., >20%) and assignments are providing data informing student progress towards the outcome.	Adequate sample size collected across measures in relation to total program enrollment (e.g., 10-20%) and assignments are providing data informing student progress towards the outcome..	Sample size collected across measures is not adequate in relation to total program enrollment (e.g., <10%) OR assignments are not providing data informing student progress towards the outcome.	
<b>Rigor of the performance criteria</b>	Performance criteria/measure was sensitive enough to differentiate between exceptional, adequate and weak performance.	Performance criteria were sensitive enough to differentiate between adequate and exceptional performance.	Performance criteria are not sensitive. No difference was identified between student performance. All met the criteria.	
<b>Data</b>	Data entry was complete, rational, AND good contextual information was provided (i.e., additional information beyond restating the results in word form).	Data entry was complete and rational. Missing data was accounted for.	Data was complete but contained issues (i.e., # met was greater than total sample size, sample size was greater than enrolled numbers, outcome was "Met" but none of the measures were "Met," missing data not accounted for).	A significant amount of data was missing AND the program did not account for missing data.
<b>Reflections</b>	Exceptional (3) Faculty analyzed and applied assessment results for programmatic improvements. Demonstrated thoughtful recommendations for closing the loop and using data for improvement or concluded that no changes were necessary.	Adequate (2) Faculty analyzed the data and made reasonable recommendations for improvements or provided rational why improvements would not be needed.	Not Adequate (1) Faculty reported on assessment data but did not make well thought out recommendations OR concluded that no changes were necessary based on the data.	No recommendations

## UOEEE Program Assessment Resources

UOEEE Home Page: <https://uoeee.asu.edu/>

UOEEE Assessment Portal: <https://uoeee.asu.edu/assessment-portal>

UOEEE Assessment Handbook: <https://uoeee.asu.edu/sites/default/files/docs/UOEEEPHandbook.pdf>

UOEEE Survey Reporting Portal: <https://uoeee.asu.edu/survey-reporting>

ASU Academic Program Review Portal: <https://provost.asu.edu/academic-program-review>

AAC&U VALUE Rubrics: <https://www.aacu.org/value-rubrics>

Carnegie Mellon University:

<https://www.cmu.edu/teaching/assessment/assesslearning/rubrics.html>

Higher Learning Commission: Guiding Values

<https://www.hlcommission.org/Publications/guiding-values.html>

## Assessment References from ASU Library Resources

- [Assessment in Mathematics Education: Large-Scale Assessment and Classroom Assessment](#) (online text)
- [Research Assessment in the Humanities: Towards Criteria and Procedures](#) / Hans - Dieter Daniel; Sven E. Hug; Michael Ochsner. [Springer 2016](#) (online text)
- [Assessment in the Science Curriculum](#) / Marlow. Ediger. S.I. : Distributed by ERIC Clearinghouse 2001
- [Assessment in social work practice](#) Carol H. Meyer 1924-New York: Columbia University Press c1993
- [Assessment: a sourcebook for social work practice](#) Julia B Rauch; Families International (Milwaukee, Wis.) - Milwaukee, Wis.: Families International c1993
- [Assessment in Student Affairs, Second Edition](#) John H. Schuh, J. Patrick Biddix, Laura A. Dean, and Jillian Kinzie (online text)
- [Outcomes assessment for law schools](#) / Gregory S. Munro (Gregory Scott), 1948- Gonzaga University. School of Law. Institute for Law School Teaching. Spokane, Wash. : Institute for Law School Teaching, Gonzaga University School of Law c2000
- [Assessment in higher education: politics, pedagogy, and portfolios](#) Patrick L. Courts, Kathleen H McInerney: Westport, Conn. : Praeger 1993
- [Assessment in Mathematics Education: Large-Scale Assessment and Classroom Assessment](#) Suurtamm, Christine; Thompson, Denisse R.; Kim, Rae Young; Moreno, Leonora Diaz; Sayac, Nathalie; Schukajlow, Stanislaw; Silver, Edward; Ufer, Stefan; Vos, Pauline: Springer International Publishing, Cham 2016 (online t
- [Approach to Learning and Assessment in Physics](#) Leslie. Dickie John Abbott Coll., Sainte Anne de Bellevue (Quebec): S.I. : Distributed by ERIC Clearinghouse 1994
- [Marking and assessment in English](#) Pauline. Chater: London; New York: Methuen 1984

- [A measure of success: from assignment to assessment in English language arts](#) Mary Frances. Clagget: Portsmouth, NH: Boynton/Cook Publishers c1996
- [Measuring up: educational assessment challenges and practices for psychology](#) Dana Dunn; Chandra Mehrotra; Jane S Halonen: Washington, DC: American Psychological Association c2004 (online text)
- [Assessment for Learning in Law](#) John O. Mudd: S.I. : Distributed by ERIC Clearinghouse 1986
- [Assessing public journalism](#) Edmund B Lambeth; Philip Meyer; Esther Thorson: Columbia: University of Missouri Press c1998
- [Assessment in Mass Communication](#) Susan Tyler. Eastman: S.I. : Distributed by ERIC Clearinghouse 1993
- [Handbook of measurement and assessment in behavioral sciences.](#) Dean K. Whitla: Reading, Mass., Addison-Wesley Pub. Co. 1968
- [Assessment in arts education: a necessary discipline or a loss of happiness?](#) Malcolm Ross 1932- 1st ed. Oxford; New York: Pergamon 1986
- [Media education assessment handbook](#) William G Christ Mahwah, N.J. : L. Erlbaum 1997
- [The problem of assessment in art and design](#) Trevor Rayment Bristol: Intellect 2007
- [Student Assessment in Architecture Schools](#) Sarah M. Dinham: S.I. : Distributed by ERIC Clearinghouse 1988
- [Assessment in Management, Nursing, and Teaching at Alverno College](#) Georgine. Locker: S.I. : Distributed by ERIC Clearinghouse 1986
- [Assessment in business education](#) Jim D Rucker; Ramona J Schoenrock; National Business Education Association: Reston, Va. : National Business Education Association 2000
- [Assessment in education](#) D. G. Lewis: New York, Wiley c1975
- [Assessment in the History Curriculum](#) Marlow. Ediger : S.I. : Distributed by ERIC Clearinghouse 2000
- [Assessment Clear and simple: a practical guide for institutions, departments, and general education](#) Barbara Walvoord: 1st ed. San Francisco: Jossey-Bass c2004
- [Assessing student learning: a common sense guide:](#) Linda A. Suskie 2nd ed. San Francisco: Jossey-Bass c2009

-----

Articles / studies / reports:

- Down and In Assessment Practices at the Program Level (2011) NILOA  
<https://www.learningoutcomesassessment.org/documents/NILOAsurveyreport2011.pdf>