**Student’s Level of Performance**

**What are the performance expectations of your graduates?**

**HIGHEST Level of Performance**

**Lowest Level of Performance**

**Example Program Goal**

Students will understand the major theoretical approaches within the discipline.

**Question**: How do we know this is a program goal rather than a program outcome?

Note the different performance expectations for the same GOAL.

**KNOWLEDGE**

Student can list the major theoretical approaches of the discipline.

**COMPREHENSION**

Students can describe the key theories, concepts and issues for each of the major theoretical approaches.

**APPLICATION**

Students can apply theoretical principles to solve real-world problems.

**ANALYSIS**

Students can analyze the strengths and limitations of each of the major theoretical approaches for understanding specific phenomena.

**EVALUATION**

Students can select the theoretical approach that is most applicable to a phenomenon **and** explain why they have selected that perspective.

**SYNTHESIS**

Students can combine theoretical approaches to explain complex phenomena.

Review each learning outcome and record your observations:

**Taxonomy of Learning Domains (Bloom’s Taxonomy)**

In 1956, Benjamin Bloom, along with a group of educational psychologists, established a way to “assess student [learning] and the outcomes of educational practice” (Eisner, 2000, p. 2). In doing so, a hierarchy was established to classify cognitive operations—represented as action verbs—in the order of their complexity. A students ability to perform at the highest level means that they can perform at the level that precedes it. Bloom’s taxonomy was updated in the 1990’s by a group of cognitive psychologists lead by Lorin Anderson who was a former student of Bloom. These updates are reflected in the taxonomies below.

**Cognitive Learning Domain**

Student learning outcomes associated with the cognitive domain or **knowledge** typically use verbs like those below to describe what the student should know as a result of exposure to some level of knowledge. Please note that the listing of verbs below is **not** exhaustive nor is it mutually exclusive.

|  |  |  |
| --- | --- | --- |
| **Basic Knowledge** | **Continuum**  | **Higher Order Thinking** |
| **Remembering****(knowledge)** | **Understanding****(comprehension)** | **Applying****(application)** | **Analyzing****(analysis)** | **Evaluating****(evaluation)** | **Creating****(synthesis)** |
| Can the student recall or remember the information? Student remembers orrecognizes information orspecifics as communicated with little personal assimilation. | Can the student explain ideas or concepts? Student grasps the meaning behind the information and interprets, translates, or comprehends the information.  | Can the student use the information in a new way? Student uses information to relate and apply it to a new situation with minimal instructor input.  | Can the student distinguish between the different parts? Student discriminates, organizations, and scrutinizes assumptions in an attempt to identify evidence for a conclusion.  | Can the student justify a stand or decision? Student judges or evaluates information based upon standards and criteria, values and opinions.  | Can the student create a new product or point-of-view? Student creatively applies knowledge and analysis to integrate concepts or construct an overall theory.  |
| **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** |
| CiteDefineDuplicateEnumerateIdentifyImitateLabelListMatchMemorizeNameQuoteRecallRepeatReproduce StateWrite | ClassifyConvertDefine DescribeDiscussEstimateExplainGeneralize IdentifyIllustrateLocateParaphraseRecognizeReportRestate Select SummarizeTranslate | ApplyChartChooseComputeDemonstrateDetermineDramatizeEmployEstablishIllustrateInterpretOperate Schedule SketchSolveUseWrite | AnalyzeAppraise CompareContrastCorrelateCriticize DiagramDifferentiate DiscriminateDissectDistinguish Examine ExperimentInferInvestigateLimitOutlineQuestionSeparateTest | AccessAppraise ArgueConcludeCritiqueDecideDefendDiagnoseEvaluateJudge JustifyRankRecommendSelect Support Value  | Assemble Construct Create Design Develop FormulateGenerateHypothesizeInitiateInventModifyReframeSynthesizeWrite |

**Psychomotor Learning Domain**

Student learning outcomes associated with the psychomotor domain typically use verbs that are **skill or task-oriented**, like those below, to describe what the student should be able to do as a result of exposure to something. Please note that the listing of verbs below is **not** exhaustive nor is it mutually exclusive.

|  |  |  |
| --- | --- | --- |
| **Basic Skills Level** | **Continuum**  | **Critical Understanding of Performance** |
| **Observe** | **Model** | **Recognize Standards** | **Correct** | **Apply** | **Coach** |
| Students translate sensory input into physical tasks or activities. **\*SLO’s not written at this level.** | Students are able to replicate a fundamental skill or task.  | Students recognize standards or criteria important to perform a skill or task correctly.  | Students use standards to evaluate their own performances and make corrections.  | Students apply this skill to real life situations.  | Students are able to instruct or train others to perform this skill in other situations.  |
| **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** |
| HearIdentifyObserveSeeSmellTasteTouchWatch | AttemptCopyFollowImitateMimicModelReenactRepeatReproduceShowTry | CheckDetectDiscriminateDifferentiateDistinguishNoticePerceiveRecognizeSelect | Adapt AdjustAlterChangeCorrectCustomizeDevelopImproveManipulateModifyPracticeRevise  | BuildComposeConstructCreateDesignOriginateProduce  | DemonstrateExhibitIllustrateInstructTeach Train |

**Affective Learning Domain**

Student learning outcomes associated with the affective domain typically use verbs that are **behavior oriented (correspond to attitudes or values)**, like those below, to describe what the student should think as a result of exposure to something. Please note that the listing of verbs below is **not** exhaustive nor is it mutually exclusive.

|  |  |  |
| --- | --- | --- |
| **Inherited Value System** | **Continuum**  | **Well Thought-out Value System** |
| **Receiving** | **Responding** | **Valuing** | **Organizing** | **Characterizing**  |
| Students become aware of an attitude, behavior, or value.  | Students exhibit a reaction or change as a result of exposure to an attitude, behavior, or value.  | Students recognize value and display this through involvement or commitment.  | Students determine a new value or behavior as important or a priority.  | Students integrate consistent behavior as a naturalized value in spite of discomfort or cost. The value is recognized as a part of the person’s character.  |
| **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** | **Verbs for LO’s** |
| AcceptAttendDescribeExplainLocateObserveRealizeReceiveRecognize | BehaveComplyCooperateDiscussExamineFollowModelPresentRespondShowStudies  | AcceptAdaptBalanceChooseDifferentiateDefendInfluencePreferRecognizeSeek Value | Adapt AdjustAlterChangeCustomizeDevelopImproveManipulateModifyPracticeRevise  | AuthenticateCharacterizeDefendDisplayEmbodyHabituateInternalizeProduceRepresentValidateVerify  |

**Reference**

Eisner, E. W. (2000). Benjamin Bloom. *Prospects: The Quarterly Review of Comparative Education*, XXX(3), 1-7.