

### Workshop for GEP Alignment of Learning Outcomes 10/29/2021 via Zoom

# By the time we are done with this workshop, you will be able to:

- ✓ Define alignment
- ✓ List the Bloom's taxonomy's levels of cognitive tasks
- ✓ Explain how the Bloom's taxonomy and the GEP LOs are connected
- ✓ Discuss examples of how the GEP LOs are used in discipline-specific courses

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## Workshop Flow





### Let's define alignment

#### **COURSE LEVEL ALIGNMENT**

Alignment is achieved when all the critical components of a course support student achievement of learning outcomes. It's one of the key elements in instructional design.

#### PROGRAM LEVEL ALIGNMENT

■ The program alignment means that instructor's learning outcomes in a particular course algin well not only with the content and the skills they are aiming to develop for their students, but also align with the major or program learning outcomes and if the course belongs to the General Education Program, some of the course learning outcomes.



#### **Bloom's Taxonomy and Learning Outcomes**



#### APPLYING

USE INFO IN A NEW (BUT SIMILAR) FORM

use, diagram, make a chart, draw, apply, solve, calculate

#### UNDERSTANDING & MAKING SENSE OUT OF INFO interpret, summarize, explain, infer, paraphrase, discuss

#### REMEMBERING FIND OR REMEMBER INFO list, find, name, identify, locate, describe,

memorize, define

Image source: https://kpu.pressbooks.pub/learningtolearnonline/blooms-graphic/



## Understanding Alignment of Learning Outcomes

#### **Steps to follow:**

- Recognize cognitive complexity of learning outcomes in Bloom's taxonomy.
- Explain the complexity of learning outcomes as a nested hierarchy.
- Identify alignment of GEP LOs and course LOs.



## What makes an LO "Good?"

#### Attributes of well-constructed LOs:

- Succinct.
- Deal with <u>knowledge</u>, <u>skills</u>, or <u>dispositions</u> that students should possess at the end of the course.
- Clearly indicate what you expect students to do by using <u>action words</u> (See Bloom's taxonomy).
- •Assessable.
  - Measurable
  - Involve only one action word (no double-barreled LOs)

## Bloom's Taxonomy

•Originally developed to categorize educational goals based on complexity (Bloom et al., 1956)

•Revised to emphasize dynamism and to include action verbs to describe cognitive processes associated with level. (Anderson, et al, 2001) For action words, google "Bloom's Taxonomy."



**Modified from:** Armstrong, P. (2010). Bloom's Taxonomy. Vanderbilt University Center for Teaching. Retrieved from https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/.

## **Bloom's Taxonomy**

- More of a nested-hierarchy.
- Rather than levels, in this depiction complexity is represented by size.
- Simple educational goals nest within more complex goals.
- Because of this, students must master "lower levels" in order to achieve "higher levels."
- But there is added complexity, because of interaction between different types of knowledge.



## **Nested Hierarchies of Learning Outcomes**



It might be that higher level learning outcomes encompass numerous low-level learning tasks. For instance, to analyze something effectively, students will need to remember and understand multiple concepts.



#### **Recognizing Good Program Level Alignment**

For a Course learning outcome to align with a GEP LO:

- Look for action words at the same level of Bloom's taxonomy, or at a more complex level.
- Look for one or more of the "objects" to be reflected in a discipline-specific context.

#### For an assessment to align with an LO

- Look for the ability to measure the indicated action word.
  - Knowledge can be checked with multiple choice or True/False questions
  - All other levels typically require verbal explanation for accurate assessment.
  - Creation and some applications require production of an artifact.

#### REFERENCES

Anderson, L.; Krathwohl, D., Airasian, P., Cruikshank, K.; Mayer, R.; Pintrich, P.; Raths, J.; Wittrock, M. eds. (2001) *Taxonomy for Learning, Teaching, and Assessing, A: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Addison Wesley Longman, Inc.

Bloom, B.S; Engelhart, M. D.; Furst, E. J.; Hill, W. H.; Krathwohl, D.R. (1956). *Taxonomy of educational objectives: The classification of educational goals*. Handbook I: Cognitive domain. New York: David McKay Company.



#### **Spirit of the GEP LOs**







# Spirit of the GEP LOs



Demonstration of higher level LO often relies on having mastered the lower level LO, so look for alignment with learning outcomes at application/ analysis levels.

ART LO2: Identify and explain the relationship between particular traditions or genres of creative expression and their social, historical or cultural contexts.	Two levels of cognitive complexity are identified in this LO – Recognition/ remembering and Comprehension Demonstration of higher level LO often relies on having mastered the lower level LO, so look for alignment with learning outcomes at application analysis levels. Learning outcomes for the course may specify particular traditions or genres, and discipline relevant social/ historical/ cultural contexts.	Identify: Simple/ multiple-choice, auto graded quiz. May also use listing, or short-answer/fill in blank/matching questions. Explain: By definition, an explanation must be verbal. Assessment instruments include a paper, report, discussion post, project, or essay exam/quiz question. An explanation must make clear reasons, causes, or connections between two or more entities. Explanation goes beyond simple description of the relationship.
ART LO3: Demonstrate an understanding of creative expression by producing or performing a creative work.	Two levels of cognitive complexity are identified in this LO: comprehension and creation. Look for learning outcomes that use action words specifying an understanding of creation—explain, demonstrate, discuss, illustrate, summarize. Learning outcomes such as this would only partially align with the GEP outcome, as they do not emphasize the production of a creative work. Look for learning outcomes using action words that specify creation: adapt, combine, compose, construct, create, design, develop, etc.	Demonstrating understanding: Because of the wording the this LO, it is possible that students may demonstrate their understanding of creative expression verbally, so there may be a written description of creative work. There may be essay or short-answer questions, papers, reflections, or discussion posts that fulfil this requirement. However, such learning outcomes would only partially satisfy the GEP outcome, unless they were accompanied by the PRODUCTION of an artifact. The best assessment instruments would involve the creation of an artifact Look for 'File upload' assignment in Canvas, performance, or some other physical submission of a creative work. Look for rubrics or grading criteria that specify how the "understanding" of creative expression is demonstrated.





## **Example One – More Clarity is Needed**

- ART LO1: Describe, analyze or critique creative works utilizing knowledge of relevant aesthetic criteria or stylistic forms.
  - 1. Explanation of alignment of course LOs to this learning outcome

Campus Orchestra is a string ensemble (one credit) open to non-music majors from across campus. We rehearse a variety of different musical compositions representing different eras, different genres, different styles, and different cultures. Our main course learning objective in Campus Orchestra is to "develop and refine musical aspects including: tone quality, intonation, rhythm, balance, blend, technique, interpretation, and performance." Tone production, intonation, rhythm, balance, blend, technique, and interpretation include almost all the relevant aesthetic criteria any musician/artist uses in evaluating, describing, or critiquing the performance of a musical work. Our work in Campus Orchestra is inherently focused on the first Arts learning objective.

#### 2. Brief description of course learning activities targeting this learning outcome

- Each Campus Orchestra rehearsal is centered around the idea that performing in a musical ensemble is an active and collaborative experience. Students engage verbally in every rehearsal critiquing and analyzing our playing and rehearsing. As we work together during rehearsal, students are continually offering critical feedback and honing their critical ear. As we progress through a piece, their critique becomes more detailed and insightful as our ensemble improves and they become increasingly skilled and familiar with the pieces.
  - 2. During a non-Covid semester we attend two live concerts on campus and the students write concert reports to demonstrate a written ability to analyze and critique creative works. This semester the students wrote a reflection critiquing three of our own recorded performances. The students all listened to the same recordings of three string orchestra works we worked on: O Desayo (arranged by Carrie Lane Gruselle), Rhythms of Africa (by Soon Hee Newbold) and Tree House (by Yukiko Nishimura).





ART LO1: Describe, analyze or critique creative works utilizing knowledge of relevant aesthetic criteria or stylistic forms.

1. Explanation of alignment of course LOs to this learning outcome

MSTU 160 introduces students to the practice of analyzing time-based media. Throughout the course, we learn the terminology associated with film narrative, mise-en-scene, cinematography, editing, and sound, and how to use those terms in order to explain meaning and function in film. I use the following course-specific LOs to meet this outcome:

- Define the fundamental principles of film form and style, including narrative features, mise-en-scene, cinematography, editing, and sound;
- Use the language of film analysis to identify and analyze cinematic elements, using knowledge of relevant aesthetic criteria to think critically about what they see and hear when watching time-based media.
- 2. Brief description of course learning activities targeting this learning outcome

Nearly every learning activity in this course is geared towards helping students understand film style, how to describe what they see and hear, and how to make arguments about how style and narrative choices in film have meaning and function. Each week, lectures with examples introduce students to key terms, students watch a film, they read a chapter on that week's concepts, they take a quiz, and then they participate in a 50-minute discussion section in which we isolate scenes and elements from that week's film in order to come up with ideas about meaning in the film.



## Example THREE – Course LOs & GEP LOs

#### HP LO1: Use primary sources as evidence to answer questions about historical change.

1. Explanation of alignment of course LOs to this learning outcome

#### **INTENDED LEARNING OUTCOMES**

This course is designated as Historical Perspectives under the "Human Cultures and the Sciences" level of the General Education Program (GEP). Embodying the mission of general education for providing a broad "liberal education" through which students "demonstrate critical thinking" to "succeed in a rapidly changing global society" and thrive as "responsible global citizens," this course directly aligns with GEP learning outcomes.

With diligent effort, students will improve their ability to:

• Recognize critical thinking as a process of identifying, analyzing, evaluating, and constructing reasoning in deciding what conclusions to draw or actions to take.



- Use primary sources as evidence to answer questions about historical change in a specific cultural or global context (HP LO1)
- Employ critical thinking to describe differences among interpretations of the past through scholarly secondary sources and academic debates
- Analyze institutional and cultural changes in various human societies through specific historical case studies
- Demonstrate curiosity and empathetic insight towards diverse cultural perspectives by embodying interpersonal professionalism and global citizenship



# Example FOUR – Scaffolded Learning

- HU LO1: Read closely, think critically, and write effectively about texts or cultural artifacts that reflect on perennial questions concerning the human condition (such as the search for truth and meaning, the confrontation with suffering and mortality, or the struggle for justice, equality, and human dignity).
  - 1. Explanation of alignment of course LOs to this learning outcome

This course requires students demonstrate skills of close reading, critical thinking and effective writing in relation to issues of gender and religion. Students must read challenging essays which make diverse arguments about societal gender codes, the power of religious language and symbols, and women's roles within religious organizations. Students must exercise critical thinking and effective writing in the composition of essays which clearly explain and respond to some of these arguments.

2. Brief description of course learning activities targeting this learning outcome

There are four short essays due in this course, each one of which is assessed according to mastery of content (reflecting close reading), clarity of argumentation (reflecting critical thinking) and the mechanics of writing (reflecting effective writing). Students receive feedback for each essay in the form of comments on the text and scoring on a rubric. The hope is that students are able to improve their writing skills as they seek to improve with each assignment. At the end of the course, students were required to complete a mini research paper that built upon one of their short essays and which offered an argument supported by evidence, again demonstrating skills in critical thinking and effective writing.



## Questions? Suggestions?

