Course Mapping & Alignment

Session Resources:

- Session will be recorded.
- Slide deck will be shared.
- Links to resources throughout presentation.
- Book a consultation with your instructional designer!

What do you hope to take away from this session?

Agenda:

Review of Blooms and Objectives
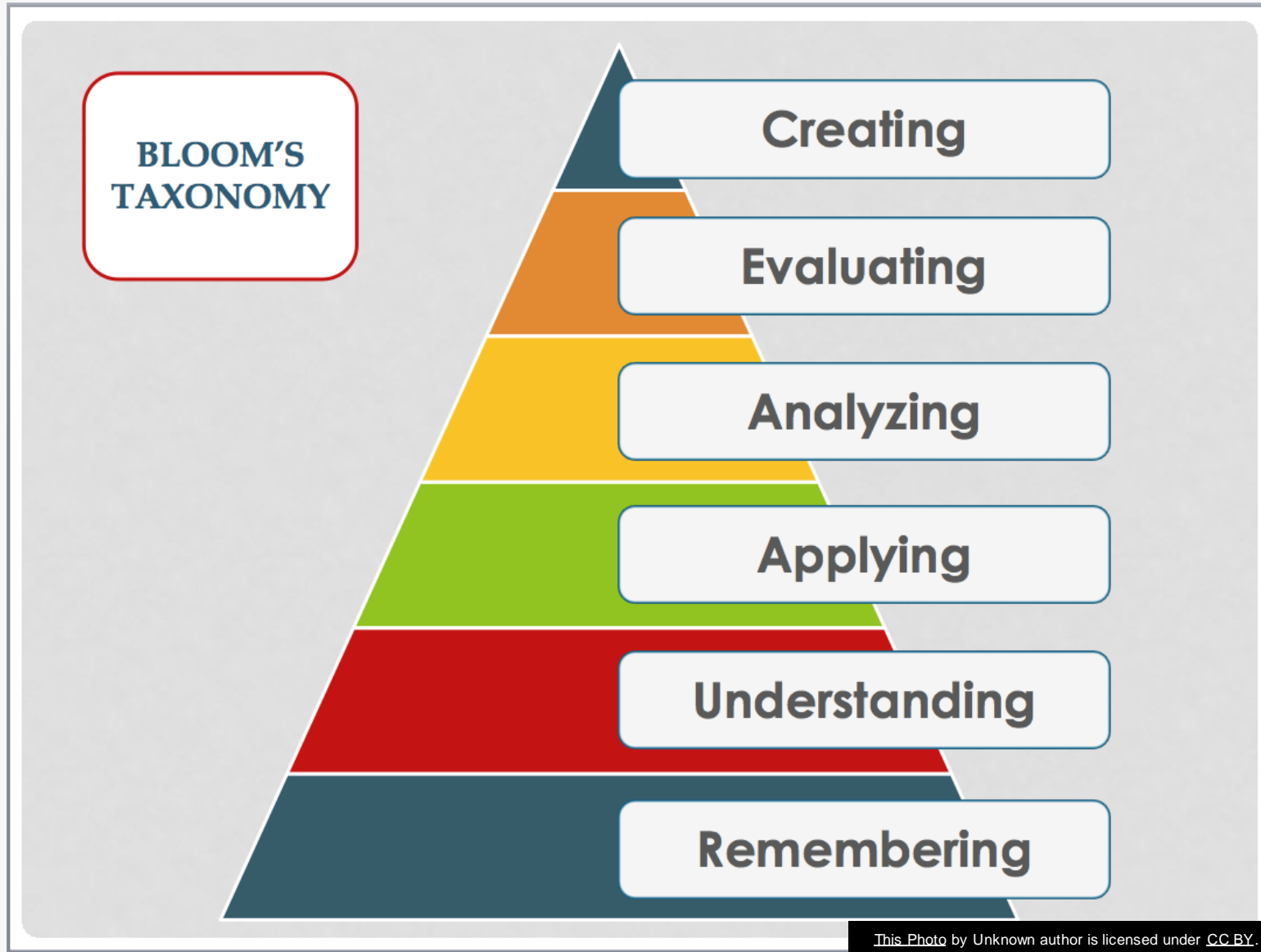
Why Align?

3 Stages of Backwards Design

Alignment Examples

Next Steps

Resources

BLOOM'S TAXONOMY

Creating

Evaluating

Analyzing

Applying

Understanding

Remembering

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Review: Bloom's Taxonomy

Review: Bloom's Verbs

01 KNOWLEDGE:
Define,
Identify,
Describe,
Recognize,
Tell,
Explain,
Recite,
Memorize,
Illustrate,
Quote

02 UNDERSTAND:
Summarize,
Interpret,
Classify,
Compare,
Contrast,
Infer,
Relate,
Extract,
Paraphrase,
Cite

03 APPLY:
Solve,
Change,
Relate,
Complete,
Use,
Sketch,
Teach,
Articulate,
Discover,
Transfer

04 ANALYZE:
Contrast,
Connect,
Relate,
Devise,
Correlate,
Illustrate,
Distill,
Conclude,
Categorize,
Take Apart

05 EVALUATE:
Criticize,
Reframe,
Judge,
Defend,
Appraise,
Value,
Prioritize,
Plan,
Grade,
Reframe

06 CREATE:
Design,
Modify,
Role-Play,
Develop,
Rewrite,
Pivot,
Modify,
Collaborate,
Invent,
Write

teachthought
WE GROW TEACHERS

Review: Why use learning objectives?

- Ensure course/module/daily activities are helping students gain proficiency in the course (alignment)

- Show students connection between course content, activities and assessments and learning objectives

This is also why we align.

Review: Planning Objectives:

Macro to micro

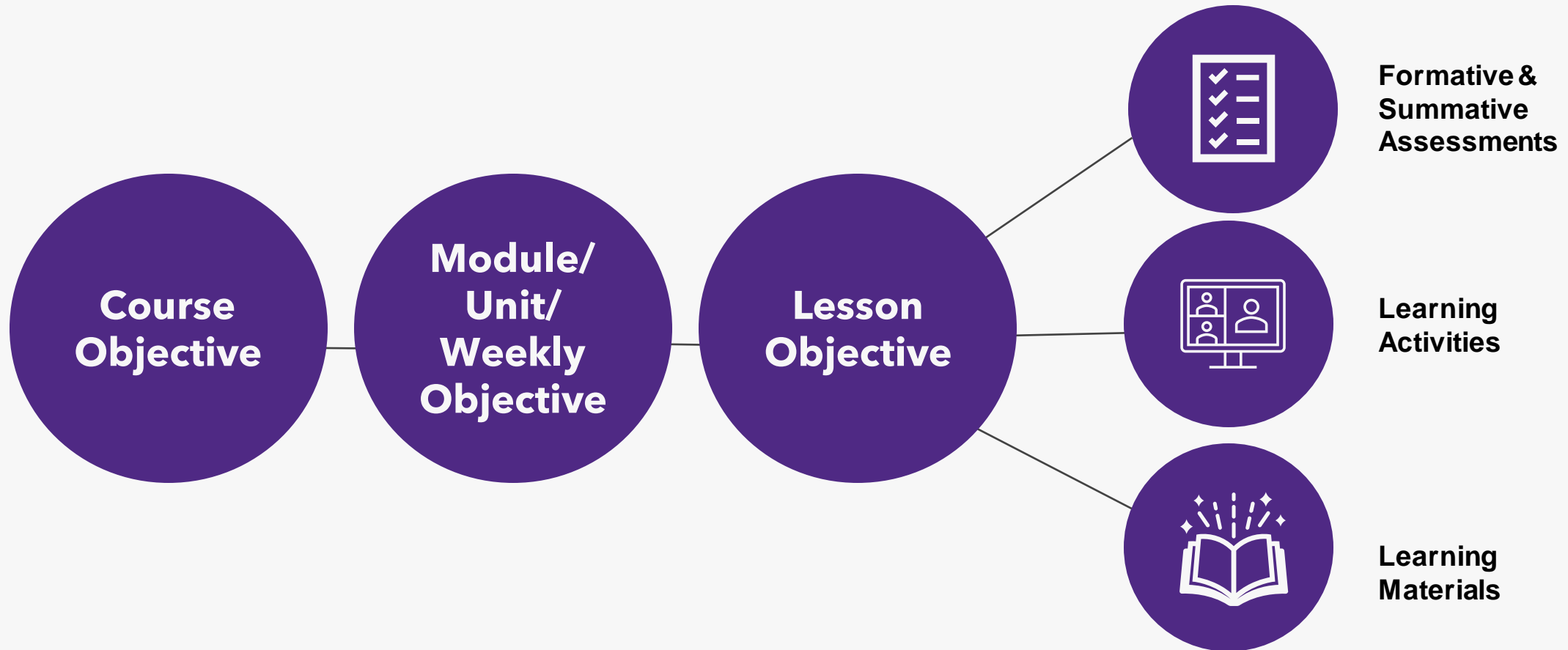**Course objectives**

↓

Module/Unit/Week objectives

↓

Activity based objectives

What are we aligning?

Course Objective

Module/ Unit/ Weekly Objective

Lesson Objective

Formative & Summative Assessments

Learning Activities

Learning Materials

Professors are designers.

Dr. Kevin Krahenbuhl

The effectiveness of our design skills corresponds to whether students achieve explicit goals.

Dr. Kevin Krahenbuhl

What are some ways we organize courses?

Content First

- The entire British literary canon
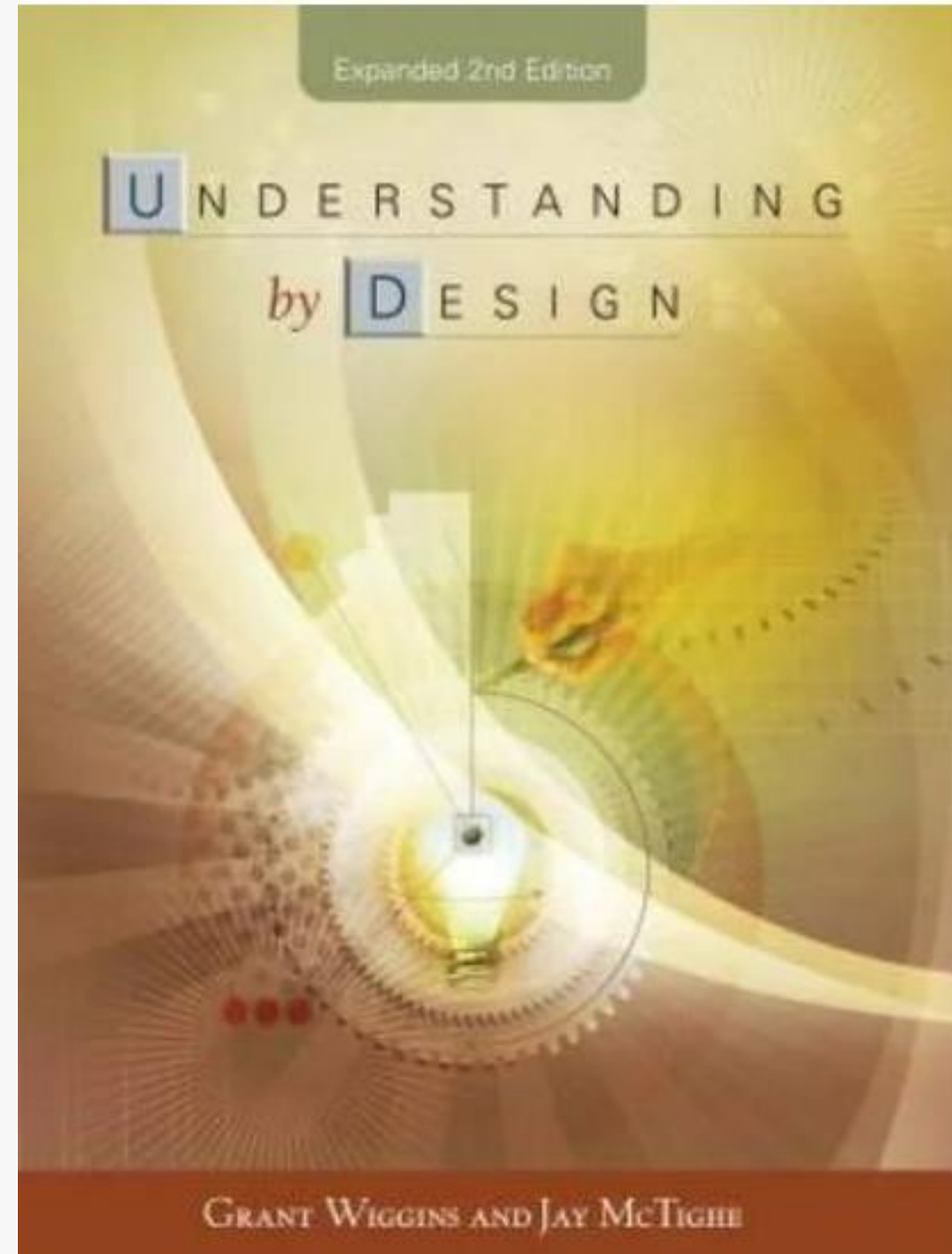
- World War II

Activity First

- Two exams and a research paper

- Five types of essays

- Certification - Board or Industry Exam (this one is tricky!)

What if, instead, we start with the end in mind?

Understanding by Design, 2005

Used in K-12 and higher ed for curriculum, course, and module design

3 stages of backward design

1. Identify Desired Results

- What should students be able to **know** and **do**?
- What **big ideas** do students need to **understand**?
- What should students be able to **transfer** to **new situations**?

2. Determine acceptable evidence

- How will we know if students have **achieved the desired results**?
- What will we accept as **evidence** of student understanding and proficiency?
- What **enabling knowledge and skill** will students need to perform effectively and achieve desired results?

3. Plan learning experiences and instruction.

- What **activities** will equip students with the needed knowledge and skills?
- What will need to be **taught** and **coached**, and how should it best be taught in light of performance goals?
- What **materials** and **resources** are best suited to accomplish these goals?

A template (sample .docs shared in Chat)

1. Decide upon the desired results	2. Determine acceptable evidence	3. Create a plan for teaching and learning
• Consider TnTech's mission when planning • Course: Write clear and measurable objectives • Module: Create as many objectives as you need for your modules	• "What does success look like?" It likely involves both what students know and what they can do. • Create or select assessments that will measure students' success in meeting the objectives • Also consider ways to engage students in self-assessment.	• How will I present material (lecture, reading, video, etc.)? • What will students do with the material during the module?
Course-level objectives Module titles Module-level objectives	To assess what students know … To assess what students can do … To prompt students' reflection …	I will present material … I will facilitate student engagement …

Adapted from UIW Teaching & Learning

TN Tech Alignment Example

Physics Dept: Dr. Robinson and Dr. Englehardt

Learning Objectives

Course-level objectives	Module-level sub-objectives
By the end of the course, you should be able to ...	Within a designated module you should be able to ...
1. ... carry out an experiment in which you gather evidence to test a prediction drawn from a theoretical relationship between measurable quantities.	a. ... follow the steps of a given procedure by giving responses to prompts asking you to make comments or to record data.
	b. ... record your observations/measurements in a way that one of your classmates could understand.
	c. ... recognize when the procedure being followed is not giving necessary data and so modify/adapt the procedure as needed.
	d. ... identify data points that seem to deviate from a regular pattern and justify a decision to accept, reject, or remeasure them.
2. ... determine the uncertainty in measured quantities and calculate the uncertainty in any results derived from them.	a. ... distinguish between systematic, instrumental, and random uncertainties in terms of their origin and importance.
	b. ... estimate/calculate the uncertainty associated with a measured quantity.
	c. ... determine the uncertainty in a value calculated from measured quantities that have their own uncertainties.
	d. ... demonstrate that you understand the statistical significance of uncertainties quoted with measured and calculated quantities.
3. ... construct and interpret graphs that show the relationship between measured quantities.	a. ... assign measured and controlled variables to appropriate graph axes, choosing suitable axis scales for the range of values to be plotted.
	b. ... manipulate either the data or the scaling to produce a graph that should be linear if the relationship being tested is to be supported.
	c. ... perform a linear least-squares fit to plotted data and use a statistical test to judge 'goodness of fit'.
	d. ... use the reported parameters and uncertainties of a linear least-squares fit to calculate derived quantities with their associated uncertainties.
4. ... use the evidence from an investigation to reason logically as to whether a proposed relationship/prediction is supported or refuted.	a. Represent the data collected in a way that illustrates whether the claimed relationship is supported or refuted.
	b. Explain how the results of an investigation are consistent/inconsistent with a given relationship/prediction by referring to the representation in 4a.
	c. Appropriately assesses the consistency of measured or derived quantities from different investigations, considering statistical uncertainties.
	d. Appropriately assesses the consistency of measured or calculated quantities with known values, considering statistical uncertainties.
5. ..., given a theoretical model of the relationship between measurable quantities, design an investigation that will be a fair test of a prediction based on that model.	a. Make a prediction for an experimental outcome based on a theoretical model of a possible relationship between measurable quantities.
	b. Identify what quantities need to be controlled and measured to fairly test a given prediction.
	c. Identify an appropriate range and quantity of measurements needed to test a given prediction.
	d. Outline an experimental procedure that could be followed by a peer to successfully conduct the investigation.

Stage	Learning Activities	Assessments
Introduction	1. Overview of one course level objective. 2. Short 'case study' illustrating the importance of objective topic. 3. Overview of technical skills introduced in this module. (When needed.)	1. Short LMS quiz over Introduction 2. Prompted discussion post and response (small group).

Experiment	1. Work through a Science Interactive (SI) lesson.
	  a. Exploration (intro to physics context and learning objectives on SI site)
	  b. Experiment (follow steps and enter responses to prompts on SI site)
	  c. Evaluation (answer prompts on SI site)
	2. Download report from SI site and upload to LMS.
		1. Mastery of targeted module sub-objectives is assessed by instructor/TA from uploaded report of SI lesson.
		2. Prompted discussion post and response (small group).

Course Name: EDUB 6050/7050, Assessment in Behavior Analysis

Instructor Name: Heather Rippetoe

Date: Fall 2023

Designer Name: Lacy Means

Modality: On-ground

Program Learning Objectives/Outcomes Addressed: [Optional]

Course Learning Objectives:

By the end of this course, students will:

1. understand and apply behavior assessment procedures for school, clinical, and residential settings.

2. evaluate and create a program plan for behavior analytic services based on assessment data.

Course Materials

Textbooks required:
- Cooper, J.O., Heron, T.E., & Heward, W.L. (2019). Applied behavior analysis (3rd Ed.). Pearson Education, Inc
- Cipani, E. (2017). Functional behavioral assessment, diagnosis, and treatment: A complete system for education and mental health settings. Springer Publishing Company. The 2010 version may also be used.

Course Learning Objectives	Module # and Title	Module (or Week) Learning Objectives	Assessments	Activities	Instructional Materials
1	1. Introduction	• Students will become familiar with course objectives, assignments, and pacing			
1	2. Understanding Behavior Functions	• Describe the common functions of problem behavior.			
1	3. Functional Assessment	• Review records and available data (e.g., educational, medical, historical) at the outset of the case. • Determine the need for behavior-analytic services. • Identify and prioritize socially significant behavior-change goals. • Conduct a descriptive assessment of problem behavior			
2	4. Functional Analysis	• Conduct a descriptive assessment of problem behavior (continues)			

"...understanding by design in large part is intended to help us focus and prioritize our teaching."

Jay McTighe, 2021
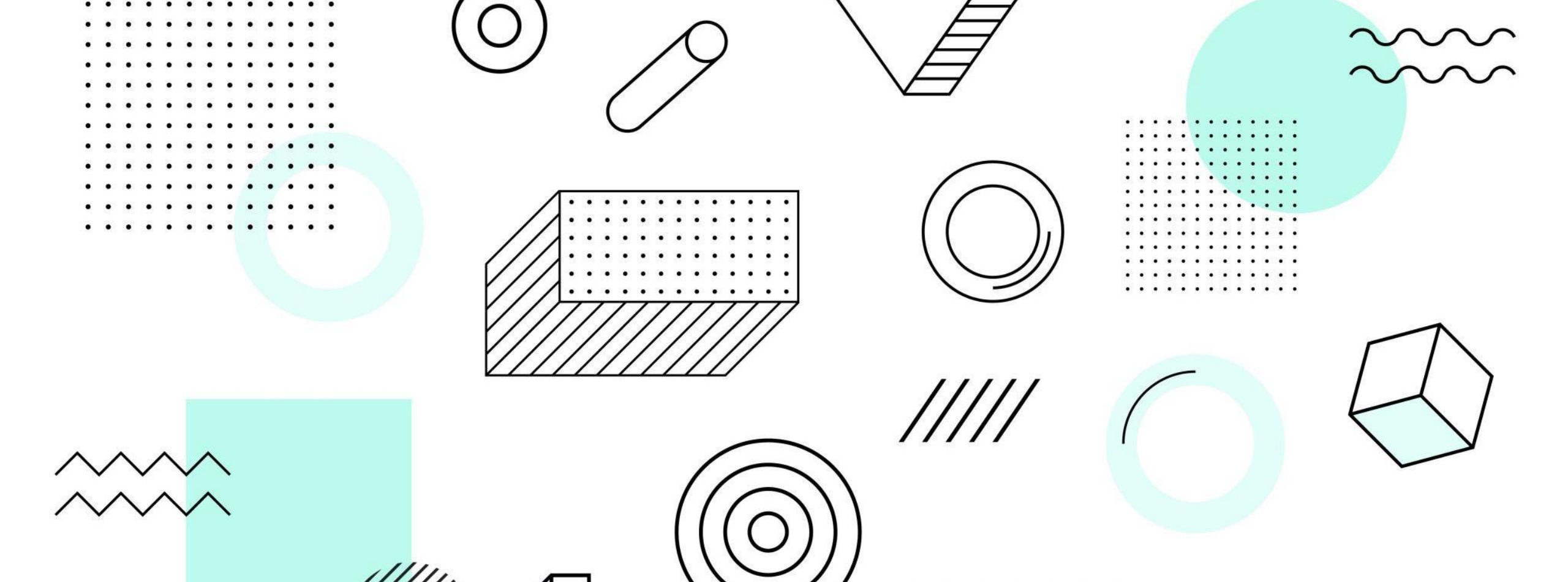
How can we prepare for future alignment?

Build a Course Map

1
- Start with your Learning Objectives
- SMART / ABCD

2
- Align assessments to Learning Objectives
- Needs assessment: How do you know that your students have learned the material?

3
- Use Course Map to guide units and lessons
- Be judicious about what you allow in: Does it align with map?

4
- Make it a team effort: Contact the CITL for a consultation.
- Schedule time to review and revise.

What can you do now?

It's never too late to make a plan.

Look over course for alignment... Look for easy wins.

Make unit / module objectives for upcoming content.

Reach out to CITL for a consultation

Book a SGID: Seek out student feedback as a starting point.

Thoughts and Questions!

Thank you!

Questions, Comments, Concerns?

[Feedback Survey](#)

Next Week's Session:
Personalized Learning
Tuesday, September 19th

[Register](#)

References:

Wiggins, G. and McTighe, J. *Understanding by Design*. 2nd Ed. ASCD, Alexandria, VA. 978-1-4166-0035-0

Resources:

UC San Diego. (n.d.) *The Online Course Mapping Guide*. [The Online Course Map Guide](#)

UIW Teaching & Learning. Jay McTighe *Backward Design Session 1*. (2021).   https://youtu.be/LAzNHrmuUGQ

Wiggins, G. & McTighe, J. (2005). *Understanding by Design*. ASCD.