Course Design Institute

# Appendix I: Course Design Institute Portfolio

This CDI portfolio can be used during the institute, as well as anytime you plan a course in the future.

## Activity 1 Big Rocks: The most important things

**Purpose:** The big rocks analogy is a reminder to put the important things in your course first. Reflecting on your big rocks helps you to articulate the purpose of your course holistically. Writing them down will help colleagues understand your purpose as they provide input on your course design.

**Task:** Reflect on what is most important to you. Consider the questions below and which ones resonate with you most. Write your reflections in response to the questions prompts below.

**Criteria for success:** Your reflections should help you align your course design with your values and help others provide you with more meaningful feedback.

**Question 1:** What things about the course and/or your teaching matter most to you? What would you be unwilling to give up?

**Question 2:** How do you want your students to be different after taking your course? What would you hope they would say about the course 5 years later?

**Question 3:** What must happen for you to feel that the course has been successful?

**Question 4:** What is it about this course that makes it your course?

**Question 5:** What is the heart and soul of this course?

**Question 6:** How will integrating GenAI impact the things that matter to you most?

## Activity 2 Significant Learning

**Think of one of the most significant learning experiences you have ever had.**

* What Happened?
* Who was involved?
* Why was it significant?

## Activity 3 Course Goals

**Purpose:** Well written course goals provide the foundation for course mapping and the constructive alignment informs the design of teaching and assessment that supports student learning.

**Task:** Write down possible course goals. There is no perfect number of goals, but you likely will have 3-7 goals for each course you design.

**Criteria for success:** (Self and Facilitator)

**Learning Goal Rubric**

* Are verbs broad and do they describe the internal change that happens in the student as a result of learning?
* Are they written from the student point of view?
* Do they assume successful completion of the course?
* Do they align with multiple dimensions from Fink's significant learning?

**Reflection:** How can you examine your assumptions about learners and co-design with learners?

**Goal A:**

**Goal B:**

**Goal C:**

**Goal D:**

**Goal E:**

**Goal F:**

**Goal G:**

## Activity 4 Learning Outcomes (ELOs)

**Purpose:** ELOs help instructors make decisions about what and how to teach as well as how to assess learning. They help learners understand why that knowledge and those skills will be useful to them.

**Task:** For each goal, write corresponding learning outcomes. You have space to get started; add or delete as you need for your course planning. You will likely need more space. Each goal will have 1-3 learning outcomes. If there are many outcomes for one goal, or you find that you have outcomes that don’t fit with your goals, there may be another unarticulated goal for this course.

**Criteria for Success:** (Self, Peer, Facilitator) Use the ELO Writing Checklist:

* Uses student-centered language (Students will be able to ... SWBAT)
* Includes one observable verb. (see Appendix Bloom’s Taxonomy)
* Is clear and achievable (SMART)
* Focuses on one goal at a time
* Reflects the highest level of achievement expected in the course

|  |  |
| --- | --- |
| Goal | Learning Outcomes |
| (A) | 1.  2.  3. |
| (B) | 1.  2.  3. |
| (C) | 1.  2.  3. |
| (D) | 1.  2.  3. |
| (E) | 1.  2.  3. |
| (F) | 1.  2.  3. |
| (G) | 1.  2.  3. |

## Activity 5 Scaffolding Meaningful Assignments

**Purpose:** Scaffolding assignments can support experiential learning experience that provide opportunities for students to:

* Reflect, critically analyze, and synthesize
* Take initiative, make decisions, and be accountable for the results.
* Engage intellectually, creatively, emotionally, socially, or physically.
* Learn from natural consequences, mistakes, and successes

Considering how you will scaffold assignments can inform how you will organize your course.

**Task:** Choose one of your more complex learning outcomes (Analyze/ Evaluate or Create) and use the blank table below to brainstorm how you might scaffold assignments to support experiential learning. The columns in the table are a reminder of other audiences who might assess the learner’s performance and provide feedback.

**Criteria for Success:** (Self and peers)

* Do assignments build from simple to more complex?
* Is student learning and success in the completing the complex assignment supported?
* Are multiple audiences involved during the semester?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Audience  Emphasis | Teacher Only | Self/Reflection | Local Audience | Authentic Audience |
| Knowledge |  |  |  |  |
| Comprehension |  |  |  |  |
| Analyze |  |  |  |  |
| Evaluate |  |  |  |  |
| Create |  |  |  |  |

## Activity 6 Complete a Course Skeleton

**Purpose:** Creating a course skeleton should help you draft the structure of the entire course.

**Task:** Think back through the previous modules, your notes, and the work that you've done so far. Create a course skeleton by adding the ELOs and assessment to the first two columns of the [integrated course plan](#_Integrated_Course_Plan) (below) with potential types of assessments.

Ways to organize content:

* Chronologically
* Simple to complex
* Concrete to abstract
* Macro/micro
* distal/proximal
* How students learn
* Theory to applications
* How students will use the information in social/personal/career
* How major concepts and relationships are organized in discipline
* How knowledge has been created in the field
* around a set of questions/problems/case studies
* Disciplinary classifications
* How relationships occur in the real world

**Criteria for Success:** (Self, Peer, Facilitator) Each assessment should align with at least one outcome, and all of your outcomes should be met by what you assign students to do in the course. Ask yourself the following:

* How have you considered student learning in developing the timetable and delivery?
* Are there flexible opportunities for assessment and feedback?

## Activity 7 Integrated Course Plan

**Purpose:** The table below will ultimately inform the development of your syllabus. An integrated course plan (ICP) encourages constructive alignment of all elements of your course.

**Task:** Begin to complete this table by transferring the elements of your course skeleton. As you do, consider any changes in the order you would like to make. Add in the content and parallel content aligned with the assignments. Don’t complete the teaching method column on this iteration.

You may want to make an entry for every major topic first and then fill in what you can fit, or each big question or theory you'll explore, and then see which smaller content topics are needed to support those larger blocks.

There is no "right" final integrated course plan look. Remember that the goal is to first CHOOSE which content structure best serves the course, and then to communicate that in a way that will support students.

**Criteria for Success:** (Self, Peers, Facilitator)

**Questions to consider:**

* Does the organization match your big rocks and goals?
* Do all the elements of the course align?
* Are assessment scaffolded?
* What parallel content is necessary?

### Integrated Course Plan

| Week | ELOs | Assessments | Content | Parallel Content | Assignments | Teaching Strategies |
| --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |
| 13 |  |  |  |  |  |  |
| 14 |  |  |  |  |  |  |
| 15 |  |  |  |  |  |  |
| Finals |  |  |  |  |  |  |

Notes:

## Activity 8 Rubric Development

**Purpose:** Rubrics make it clear to learners how assignments will be evaluated. Effective rubrics can take a variety of forms. Creating a clear rubric is a great way to begin the process of clarifying the task and can also help as you begin thinking about how to share effective examples of the criteria for success.

**Task:** Consider the assignment you have selected to create or improve through application of the TILT framework. Decide what type of rubric would be most useful to you and to your students and begin drafting using the rubric templates found below.

**Criteria for Success:** (Self, Facilitator)

* Is the type of rubric selected appropriate for the assignment?
* Does it clarify expectations for learners?
* How will you gather data to evaluate and revise the rubric?

**Analytic Rubric Example:**

<https://cft.vanderbilt.edu/wp-content/uploads/sites/59/Rubric-Opinion-Paper-DB.pdf>

**Holistic Rubric Example:**

<https://cft.vanderbilt.edu/wp-content/uploads/sites/59/Rubric-Research-Paper-Winona-State.pdf>

**Single Point Rubric Example:**

<https://www.cultofpedagogy.com/single-point-rubric/>

**Holistic Rubric Template**

|  |  |
| --- | --- |
| Level | Rating scale value/metric |
| A level | Describe appropriate performance indicator |
| B level | Describe appropriate performance indicator |
| C level | Describe appropriate performance indicator |
| D Level | Describe appropriate performance indicator |

**Analytical Rubric Template**

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion | Insert first rating scale value/metric | Insert second rating scale value/metric | Insert third rating scale value/metric |
| Insert first rubric criterion/attribute | Describe appropriate performance indicator | Describe appropriate performance indicator | Describe appropriate performance indicator |
| Insert second rubric criterion/attribute | Describe appropriate performance indicator | Describe appropriate performance indicator | Describe appropriate performance indicator |
| Insert third rubric criterion/attribute | Describe appropriate performance indicator | Describe appropriate performance indicator | Describe appropriate performance indicator |
| Insert fourth rubric criterion/attribute | Describe appropriate performance indicator | Describe appropriate performance indicator | Describe appropriate performance indicator |

**Single Point Rubric Template**

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion | Things to improve | Rating scale value/metric | Things that are amazing |
| Insert first rubric criterion/attribute |  | Describe appropriate performance indicator |  |
| Insert second rubric criterion/attribute |  | Describe appropriate performance indicator |  |
| Insert third rubric criterion/attribute |  | Describe appropriate performance indicator |  |
| Insert fourth rubric criterion/attribute |  | Describe appropriate performance indicator |  |

## Activity 9 Transparent Assignments

**Purpose:** The Transparency in Learning and Teaching (TILT) Framework provides instructors with a practical way to develop and implement transparent assignments.

**Task:** Choose an assignment to develop or revise using the TILT Framework. Complete the table below by briefly describing the assignment at the top. Then list the learning outcomes from the course that align to this assignment. Continue to fill in rows 2, 3, and 4 as you describe the Purpose, Task, and Criteria for Success, and Examples.

**Criteria for Success:** (Self, Peer, Facilitator) Refer to the [Transparent Assignment Template and Checklist](https://tilthighered.com/assets/pdffiles/Checklist%20for%20Designing%20Transparent%20Assignments.pdf).

Assignment Description

|  |  |
| --- | --- |
| Component |  |
| Aligned ELO(s) |  |
| Purpose | *Skills*  *Knowledge* |
| Task |  |
| Criteria for Success |  |
| Examples |  |

## Activity 10 Active Learning Planning Table

**Purpose:** Studies have demonstrated that active learning benefits all students and can reduce or eliminate achievement gaps in STEM courses and promote equity in higher education. The table below will help you plan instruction that supports active learning.

**Task:** Begin to complete the Active Learning Planning Tool\* by considering your ELOs and choosing an active learning strategy that aligns with your ELOs and assessment methods. Develop your daily plan by developing descriptions of the activities, student work,

location, media, and materials

Space is available for you to plan three days of activities. However, you may need to plan activities that take more of less time.

**Criteria for Success: (Self, Peer, Facilitator)**

Do all the elements of the activity align? Is any parallel content necessary?

\*Table modified from Reynolds, H. and Kearns, K. D. (2016). A Planning Tool for Incorporating Backward Design, Active Learning, and Authentic Assessment in the College Classroom. College Teaching, 65:1, 17-27, DOI: 10.1080/87567555.2016.1222575 (http://dx.doi.org/10.1080/87567555.2016.1222575)

**Active Learning Planning Tool**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Design Step** | **Elements** | **Description** | | | | | |
| Identify desired results | Learning Goals/ Outcomes | Specify the knowledge, skills, and/or values that students will acquire. | Knowledge, Skill | | | Value | |
|  | | |  | |
|  | | |  | |
|  | | |  | |
| Determine acceptable evidence | Assessment | Specify how students will demonstrate their learning, considering formative vs. summative assessment and authentic context. |  | | | | |
| Plan learning experiences and instruction | First Exposure | Identify pre-class homework to introduce basics & prep students for more sophisticated & active learning in class |  | | | | |
|  | | Hook Specify an engaging entry point into the unit or class period | Day or Time 1 | Day or Time 2 | | Day or Time 3 |
| Activities | Building from the first exposure homework, identify teaching & learning activities to promote the learning goals and enable authentic assessment |  |  |  | |  |
| Student Work | Describe active vs. passive work that students will do |  |  |  | |  |
| Location | Specify where each activity will take place |  |  |  | |  |
| Media and Materials | Specify the types of teaching aids needed for each activity |  |  |  | |  |
| Reflection | Critique the learning experiences and instruction in light of the actual results. What worked well versus what would you do differently next time, in terms of student preparation, classroom activities and student work, media and materials, and time management. | | | | | | |

## Activity 11 Planning Evaluation of Instruction

Reflect on the Big Rocks, Goals and ELOs defined earlier. Identify which of these are to be used for evaluation of your course design/redesign effort. You may choose to focus on a single element/domain or to evaluate all of the outcomes defined. Remember that for every outcome selected for evaluation, one or more aligned opportunities for assessment should be identified. As a reminder, examples include, but are in no way limited to, the following:

As a result of the instruction provided,

1. Students are able to demonstrate learning effectively on assessments aligned to course learning outcomes.
2. Students report motivation to engage and to learn.
3. An environment of inclusion and equity is created for all learners.
4. Members of student groups communicate consistently and effectively.

List each of the selected outcomes for evaluation of instruction in the first column of the table below. In the second column, list sources of data that align to each selected outcome. In the third column, briefly state a justification for how the suggested measure works to assess achievement of the aligned outcome. Be sure to include at least one source of data for each selected outcome. Multiple data sources are desirable to allow for potential triangulation.

### Data Sources and Outcome Alignment Table

|  |  |  |
| --- | --- | --- |
| Outcomes for Instruction | Aligned Data Sources | Justification of Alignment |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Appendix II: CDI GenAI prompts

There are a variety of strategies for GenAI prompting including natural language, structured, and prompt chains. Natural language prompts use conversational language in a conversation with AI. Adding phrases like “go step by step”, “go slow”, and “ask me questions before you start so that your response will be more helpful” can help improve the prompting conversation with AI. The TRACI framework provides guidelines for what is included in a prompt and comprises the components T-Task, R-Role, A-Audience, C-Criteria, and I-Intent. Structured prompts use a precise format that can include a description and rules for each component. Prompt chaining is a process of iterative prompting to take advantage of the context and conversation in previous prompts.

Examples of CDI prompts can be found at [https://go.osu.edu/ai-prompts](https://go.osu.edu/ai-start) .

## Appendix III Blooms Taxonomy

The table below provides examples at various levels of Blooms Taxonomy of information used to complete an integrated course plan including:

* Verbs used for creating ELOs
* Types of assessments used that provide evidence that is appropriate for demonstrating attainment of the learning outcomes
* Sample assignments.

| Bloom’s | Action Verbs | Assessments | Assignments |
| --- | --- | --- | --- |
| Knowledge  Recall or recognition  of specific information | * Describing * Finding * Identifying * Listing * Locating * Naming * Recognizing * Retrieving | * Definition * Fact * Label * List * Quiz/Test * Reproduction * Test * Workbook * Worksheet | * Objective test items that require students to recall or recognize information:   + Fill-in the blank   + Multiple choice items with question stems such as “what is a…” or “which of the following is the definition of”   + Labeling diagrams   + Reciting (orally, musically, or in writing) |
| Comprehension   Understanding of given information | * Classifying * Comparing * Exemplifying * Explaining * Inferring * Interpreting * Paraphrasing * Summarizing | * Collection * Example * Explanation * Label * List * Outline * Quiz/Test * Recitation * Show/tell * Summary | * Papers, oral/written exam questions, problems, class discussions, concept maps, or other homework assignments that require (oral or written):   + Summarizing readings, films, speeches, etc.   + Comparing and/or contrasting two or more theories, events, processes, etc.   + Classifying or categorizing cases, elements, events, etc., using established criteria   + Paraphrasing documents or speeches   + Finding or identifying examples or illustrations of a concept, principle |
| Application | * Carrying out * Executing * Implementing * Using | * Demonstration * Diary * Illustration * Interview * Journal * Performance * Presentation * Quiz/Test * Sculpture | * Activities that require students to use procedures to solve or complete familiar or unfamiliar tasks and/or determine which procedure(s) are most appropriate for a given task. Activities include:   + Problem sets,   + Performances   + Labs   + Prototyping   + Simulations   + Clinical skills demonstration |
| Analysis  Breaking information  down into its  component elements | * Attributing * Comparing * Deconstructing * Integrating * Organizing * Outlining * Structuring | * Abstract * Chart * Checklist * Database * Graph * Mobile * Outline * Quiz/Test * Report * Spreadsheet * Survey | * Activities that require students to discriminate or select relevant from irrelevant parts, determine how elements function together, or determine bias, values or underlying intent in presented materials. These might include:   + Case studies   + Critiques   + Labs   + Papers   + Projects   + Debates   + Concept maps   + Differential Diagnosis |
| Evaluation  Judging the value of ideas,  materials and methods  by developing and applying  standards and criteria | * Checking * Critiquing * Detecting * Experimenting * Hypothesizing * Judging * Monitoring * Testing | * Conclusion * Debate * Investigation * Panel * Speech * Quiz/Test * Report * Portfolio | * A range of activities that require students to test, monitor, judge or critique readings, performances, or products against established criteria or standards. Activities might include:   + Journals   + Diaries   + Critiques   + Problem Sets   + Product Reviews   + Case Studies   + Developing a treatment plan |
| Create  Putting together ideas  or elements to develop an original idea or  engage in creative thinking | * Constructing * Designing * Devising * Inventing * Making * Planning * Producing | * Advertisement * Film * Media product * New game * Painting * Portfolio * Project * Song * Story | * Research projects * Musical compositions * Performances * Essays * Business plans * Website designs * Prototyping * Set designs * Lesson plans * Caring for patients with multiple chronic diseases |