Center for Teaching Excellence
DEAN OF FACULTIES

Student Learning Experience Design

Course Number
[Course Title]

Course Description	Prerequisites	Credit Hour(s)	Grade requirement for major	Course Format (Face-to-Face, Hybrid, Online)

What is the course's purpose? How will you communicate this purpose to students? (*Make a note to ask them on the first class day so you can clarify the purpose and value of the course.*)	How will students utilize the knowledge, skills, and values acquired in this course for other courses and career?

What online course components are being retained from 2020-2021?

Critical content/prior knowledge needed to be successful in course	Developmental Material (Where can students refresh/review critical content?)

Course Learning Outcomes

Section 2

Learning Outcome	*Assessment*	*Activities & Assignments*
[Course learning outcome]	[assessment of course learning outcome]	[engagement and application opportunities]

Section 3

Low & High Stakes Assessment Strategies
Indicate activities that are/will be incorporated into this course (if any).
[See Glossary of Assessment Strategies – Abridged on page 11.]
P=Prior Knowledge   F=Formative (*For* learning)   S=Summative (*Of* learning)

Traditional (online)   **Transformational (online)**

Quizzes (P, F, S) (Canvas)	Lab Report (F, S) (data or video provided)	Instructor Observations (P, F, S) (Zoom)	Concept Inventory (P, F) (Canvas)
Exams (S) (Zoom proctor)	Prior Knowledge Reflection (P, F)	Quizzes-Group (P, F) (Canvas, Zoom)	Concept Mapping (P, F, S) (Canvas)
Comprehensive Exams (S) (Zoom proctor)	Classroom Assessment Techniques (F)	Projects-Group (S) (Zoom)	Assignment or Exam Wrappers (F) (Canvas, Google forms)
Projects-Individual (S)	Guided or Structured Notes (F)	Presentations (S)-Group (Zoom)	Written Reflections on Learning (P, F) (Canvas, Google forms)
Writing (S)	Polls or Surveys (P, F) (Polleverywhere)	Peer Feedback & Evaluation (F, S) (Canvas Peerceptiv)/Zoom breakout rooms)	ePortfolios (S) (Canvas, Google Sites)
Presentations-Individual (S)	BreakOut Rooms (P, F, S) (Google docs or forms for deliverables)		Video Projects (S) (Canvas)
	Self-Assessment (P, F) (Google forms)		Digital Story Telling (S) (Canvas)

How is the technology being utilized benefitting your students' learning (i.e., not just using technology for the sake of using technology)? _____

_____

Other assessment activities: _____

_____

_____

What resources will be required to implement your assessment activity?

_____

_____

What technologies will be utilized for assessment activity? _____

Section 4

Engagement, Active Learning, and Instructional Technology

Check the activities that are/will be incorporated into this course (if any).
[See Glossary of Engagement, Active Learning, and Instructional Technology Terms beginning on page 12.]

Less Complex   **More Complex**

Clarification Pauses	Peer Review	Active Review Sessions	First-year Seminar or Experience
Minute Paper	Brainstorming	Role Playing	Capstone Project
Self-Assessment	Case Studies	Jigsaw Discussion	Study Abroad
Large Group Discussion	Hands-on Technology	Inquiry Learning	Internship/Field Experience
Think-Pair-Share	Interactive Lecture	Forum Theater	Learning Community
Informal Groups	Interactions with Diverse People and Content	Experiential Learning	Writing-Intensive Course
Polling	Breakout Rooms	Collaborative Assignment	Undergraduate Research
White Board Activities		Group Evaluations	Service or Community-Based Learning

Other engagement activity: _____

What resources will be required to implement your engagement activity?

_____

_____

Which technologies will be incorporated into this course?
☐ Microsoft 365 or Google
☐ Video, Podcasts
☐ Canvas, Zoom
☐ Online Tools (e.g., Turnitin, Peerceptiv, Poll Everywhere, Perusall)
☐ Other

Appendix 1 - Universal Design for Learning (UDL)
(Janesick, 2010; Harbour, Johnston, Daley, & Abarbanell, 2009: Hoffer, 2015; McGuire, Scott, & Shaw, 2003)

What is UDL?

- A framework for proactively designing a course for diverse student needs (ability, age, gender, language, race/ethnicity, religion/spirituality, sexual orientation, socioeconomic status, etc.)
- Promotes accessible pedagogy, physical spaces, and information for all students
- Guides your course preparation, instructional strategies, and assessment tools to meet multiple learning preferences

Rationale for UDL

- UDL helps increases the potential for various pathways to success for all your students
- UDL also maximizes learner's motivation
- UDL acknowledges and harnesses the power of students: identities, cultures, experiences, abilities/disabilities, and demographic characteristics

Principles of UDL

- Provide multiple means of:
  - **representation** for your students
  - **action and expression** for your students
  - **engagement** for your students

How do I use UDL in my course?

UDL instructional tools	UDL Principle and Benefit
Textbook, Lectures, Interactive websites, Course websites, Slides, YouTube, Blogs	**Representation** Helps students find, create, use, organize information. Additionally, it helps students transfer knowledge in various ways
Tests, Essays, Open book quizzes, Concept maps, Research papers, Proposal for alternate/authentic assessments (e.g., portfolios, journal writing, performances, evaluation of case studies	**Action and Expression** Gives alternative ways for students to demonstrate their learning
Authentic instruction, Connect content to student life, Interdisciplinary approaches, Innovation, Creativity, Technology friendly	**Engagement** Appreciates and advocates student centered processes to intrinsic motivation

Resources:
UDL On Campus - The Medium UDL Center - The CAST website

Appendix 2 - Writing for Learning

Check the types of writing that are/will be incorporated into this course (if any).
[See Glossary of Engagement, Active Learning, and Instructional Technology Terms.]

**Formative,
Low-Stakes**

**Summative,
High-Stakes**

Rough draft (I,C)	Field notes (I)	Lab reports (I, C)	Policy review (I,C)
Reading log (I)	Journal (I)	Case study (C)	Memo (I)
Minute Paper (I)	Mini-essay (I) (micro theme)	Poster (C)	Letter (I)
Muddiest point (I)	Blog (I)	Written peer review (C)	Proposal (I, C)
Online discussion (C)	Email (I)	Debate (C)	OpEd (I)
Reflection (I)	Presentation or Speech (I, C)	Video (I, C)	Resume (I)

Legend:	(I) Individual	(C) Collaborative

Why Low-Stakes?
- provide practice to increase fluency in preparation for higher-stakes assignments
- help students engage with and learn course content
- encourage reflection on content and the learning process
- manage expectations, increase motivation, build confidence, and reduce anxiety
- allow greater flexibility in feedback and grading

Why Collaborative?
- allow students to learn from each other & foster discussion and debate
- expose students to points of view besides their own
- open students' eyes to how their work compares to that of their peers, giving them a better sense of their own strengths and weaknesses
- encourage students to consider their audience, an important aspect of learning to write effectively and yet a component missing in many traditional assignments
- teach students to negotiate the issues inherent in any collaborative venture

References: TAMU Writing Center

Appendix 2, cont. - Writing for Assignments

	Low Stakes	**High Stakes**	**Collaborative**
Definition	• Low-stakes assignments are often assessments FOR learning or formative assessment opportunities. These assignments low point value, can be used as part of participation grade where several aspects of a high-stakes writing assignment are examined individually as part of the overall writing process • Which student learning outcomes & program outcomes are supported by low-stakes writing assignments?	• High-stakes writing can be suitable to course content, but intends to evaluate the individual student's knowledge of the content. • Which student learning outcomes & program outcomes are supported by high-stakes writing assignments?	• Collaborative assignments transform the usually solitary work of writing, editing, and public speaking into a group endeavor.
Goals	• provide students with ample practice and fluency in preparation for higher-stakes assignments • help students engage in and learn course content • give students the opportunity to reflect • can soothe the anxious student or motivate the reluctant student	• provide traditional assessment information	• allow students to learn from each other & foster discussion and debate • expose students to points of view besides their own • open students' eyes to how their work compared to that of their peers, giving them a better sense of their own strengths and weaknesses • encourage students to consider their audience, an important aspect of learning to write effectively and yet a component missing in many traditional assignments • teach students to negotiate the issues inherent in any collaborative venture
Grading	• are often not graded, or graded minimally, they are most meaningful if accompanied by feedback • graders, peers, or writing center consultants can be helpful, or students can self-assess	• may include traditional or non-traditional forms (that is, something other than a term paper, scholarly article or research paper, or essay)	• ask for a report after the first meeting that sets out the group's roles, ground rules, and schedule • decide if you will meet with groups as they work on their projects • require self or peer assessment at regular intervals during the life of the project to help regulate participation. You can also keep tabs on the group at regular intervals.
Example Assignments	1. Rough drafts 2. Field notes 3. Journals 4. Minute papers 5. Muddiest point 6. Mini-essays (micro-themes) 7. Online discussion 8. Blogs 9. Reflections 10. Written peer review	1. Lab reports 2. Policy reviews 3. Memos, emails, and letters 4. Proposals 5. OpEds 6. Resumes	1. Case studies 2. Posters 3. Proposals 4. Online discussion

Appendix 3 - Critical Thinking Question Examples
(Paul & Elder, 2014)

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. In its exemplary form, it is based on universal intellectual values that transcend subject matter divisions: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons, depth, breadth, and fairness.

(Michael Scriven & Richard Paul, presented at the 8th Annual International Conference on Critical Thinking and Education Reform, Summer 1987)
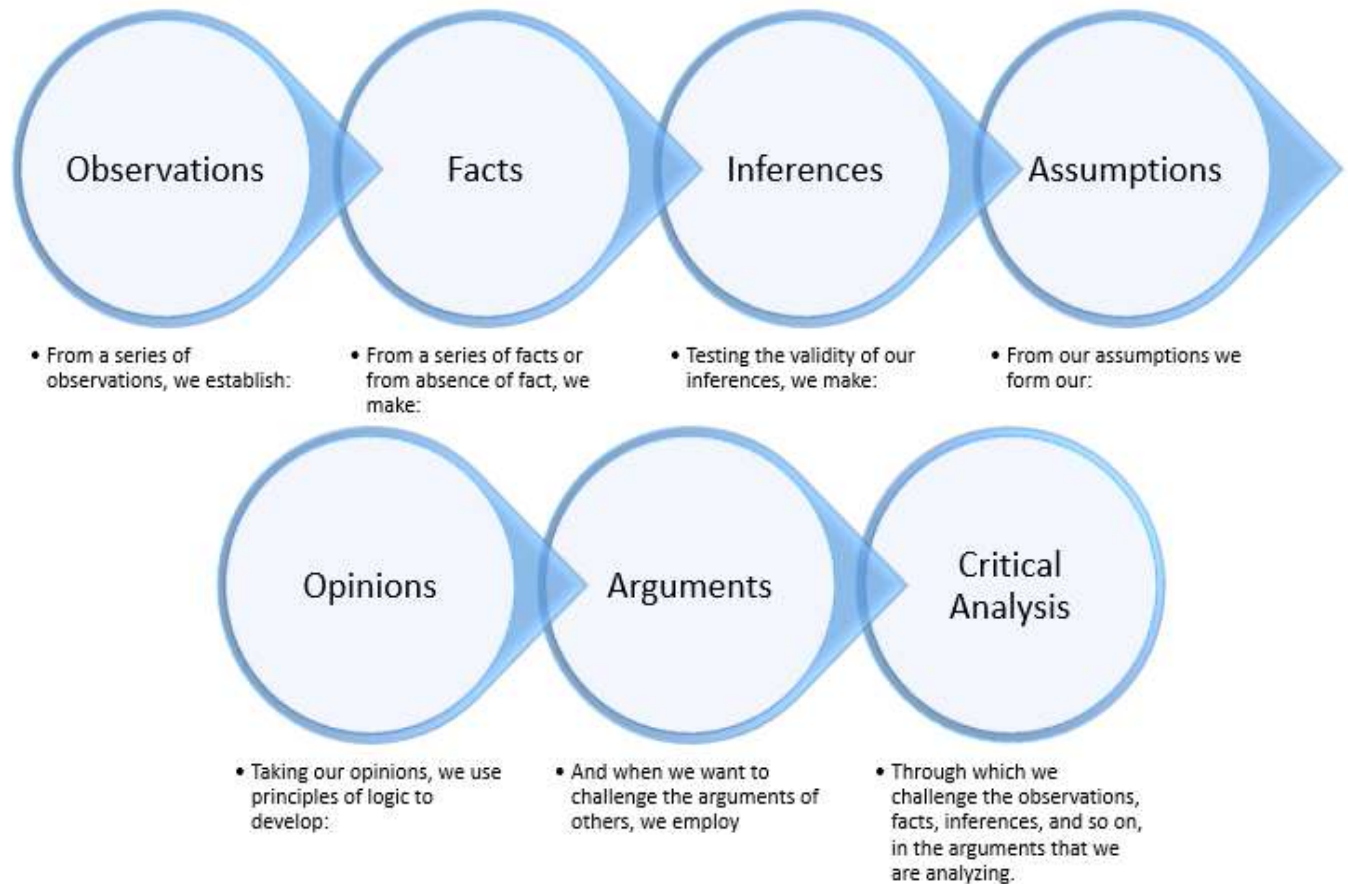
Clarity	• *Could you elaborate further?* • *Could you give me an example?* • *Could you illustrate what you mean?*
Accuracy	• *How could we check on that?* • *How could we find out if that is true?* • *How could we verify or test that?*
Precision	• *Could you be more specific?* • *Could you give me more details?* • *Could you be more exact?*
Relevance	• *How does that relate to the problem?* • *How does that bear on the question?* • *How does that help us with the issue?*
Depth	• *What factors make this a difficult problem?* • *What are some of the complexities of this question?* • *What are some of the difficulties we need to deal with?*
Breadth	• *Do we need to look at this from another perspective?* • *Do we need to consider another point of view?* • *Do we need to look at this in other ways?*
Logic	• *Does all this make sense together?* • *Does your first paragraph fit with your last?* • *Does what you say follow form the evidence?*
Significance	• *Is this the most important problem to consider?* • *Is this the central idea to focus on?* • *Which of these facts are most important?*
Fairness	• *Do I have any vested interest in this issue?* • *Am I sympathetically representing the viewpoints of others?*

Appendix 3, cont. - Critical Thinking

Elements of Critical Thinking

Observations
- From a series of observations, we establish:

Facts
- From a series of facts or from absence of fact, we make:

Inferences
- Testing the validity of our inferences, we make:

Assumptions
- From our assumptions we form our:

Opinions
- Taking our opinions, we use principles of logic to develop:

Arguments
- And when we want to challenge the arguments of others, we employ

Critical Analysis
- Through which we challenge the observations, facts, inferences, and so on, in the arguments that we are analyzing.

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Appendix 4 - Reflection

Reflection involves making conscious connections between ideas and experiences to understand and articulate their value. It is a metacognitive act (thinking about thinking) that asks the questions: "How do you know what you know?" or "How did you learn it?" or "What?, So what?, Now what?"

Resource: *TAMU Defining Reflection Overview*

Consider the **DEAL** structure below to help students reflect and formulate meaningful responses (PHC Ventures, 2013):

1. **D**escribe, in objective detail, the learning experience. The 5 W's will help here.	- When? - Where? - Who was involved and/or not involved? - What? - Why? - How?
2. **E**xamine the learning experience.	- What were you feeling? - What was beneficial and/or not beneficial? - What academic skills did you use? - What disciplinary content was relevant? - In what ways did the experience align with your current knowledge base? In what ways did the experience not align? - Why is this experience noteworthy?
3. **A**rticulate **L**earning	"I learned that"… "I learned this when"… "This [learning or experience] matters because"… "In light of this [learning or experience]"…

Appendix 5 - Glossary of Assessment Strategies – Abridged

General Categories of Assessment:

- **Preparedness Assessment:** No-stakes or low-stakes, diagnostic/introductory assessment to determine what students know and can do or to get a pre-assessment of attitudes, beliefs, mindsets, or values related to discipline of learning experience.
- **Formative Assessment:** Low-stakes assessment to provide opportunities for practice and feedback on progress, normalize failure as a part of learning process, and prepare for summative assessment.
- **Summative Assessment:** High-stakes assessment to determine level of success at achieving student learning outcomes or no-stakes or low-stakes assessment of attitudes, beliefs, mindset, or values following a course or learning experience with a goal of identifying change or growth.

Examples of Traditional Assessment Strategies:

Homework – Individual, Group	**Quiz - Individual, Group**
Project - Individual, Group	**Presentation - Individual, Group**
Paper/Report/Lab Report	**Exam/Comprehensive Exam**
Clicker Question, Poll, Survey	

Examples of Transformational Assessment Strategies:

- **Assignment or Exam Wrapper -** Reflection opportunity given out with an exam or assignment when it is returned to help the students focus on their learning process rather than just on the score.
- **Classroom Assessment Techniques (CATs)** - Quick methods for gathering data about the student learning experience in the class. Example: **"Muddiest Point" -** Students are asked at any time during the class period to write on a half-sheet of paper what they found confusing or unclear – "What was the muddiest point in the (lecture, assignment, discussion, etc.)?"
- **Concept Inventory -** Written instrument used to assess students understanding and misconceptions in a specific content area. See also D'Avanzo, C.
- **Concept Map** - Graphic approach for representing and assessing a set of content knowledge.
- **ePortfolio -** Collections of student work, assembled digitally, allowing students to demonstrate their knowledge and skill development. Especially useful for collecting evidence of student learning for outcomes difficult to assess with more traditional methods.
- **Guided Notes -** Set of notes with key information missing that students complete prior to a class session or during a class session addressing the same material.
- **Pre-test/Post-test** - Assessment administered at the beginning and end of a course, unit, etc. to determine what students know before and after instruction/practice.
- **Prior Knowledge Reflection -** Opportunity for student to recall where they have encountered a concept previously and what they know about it.
- **Self-Assessment –** Opportunity for learners to assess their own learning.

For more information on alternative assessment, see Alternative Assessment Infographic or Alternative Assessment Guide for Hybrid/Online Teaching.

Appendix 6 - Glossary of Engagement, Active Learning, and Instructional Technology Terms

Active Review Sessions (Games or Simulations): The instructor poses questions and the students work on them in groups. Then students are asked to show their solutions to the whole group and discuss any differences among solutions proposed.

Brainstorming: Introduce a topic or problem and then ask for student input. Give students a minute to write down their ideas, and then record them on the board. For example, "*What are possible safety (environmental, quality control) problems we might encounter with the process unit we just designed?*" could be a brainstorm topic in an engineering class.

Capstone Project: A capstone is a culminating experience that allows a student to bring the learning and experience of their undergraduate education together to address an issue or question that interests them in order to demonstrate mastery of an academic discipline. These experiences require students to create a project of some sort that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio of "best work," or an exhibit of artwork.

Case Studies: Use real-life stories that describe what happened to a community, family, school, industry or individual to prompt students to integrate their classroom knowledge with their knowledge of real-world situations, actions, and consequences.

Clarification Pauses: This is a simple technique aimed at fostering "*active listening*". Throughout a lecture, particularly after stating an important point or defining a key concept, stop, let it sink in, and then (after waiting a bit!) ask if anyone needs to have it clarified. Or, ask students to review their notes and ask questions on what they've written so far.

Collaborative Assignment: These assignments are designed to be completed in pairs or small groups and offer all students in the group the opportunity to practice writing, providing feedback, and presenting. Collaborative assignments are also useful tools for introducing students to recognize and incorporate different viewpoints, engage in discussion and debate, and practice teaching and learning from each other.

Experiential Learning: Plan site visits that allow students to see and experience applications to the theory/concepts discussed in the class.

Internship/Field Experience: Students participate in an industry workplace to practice real-world applications of knowledge and skills learned within their programs. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member. Internships tend to extend over the course of a semester, while field experiences are shorter and usually involve only a portion of the semester.

First-year Seminar or Experience: Small groups of first-year students meet with faculty regularly to expose students to faculty research and involve them in cutting-edge questions in academics. Students are encouraged to actively engage with faculty, peers, and reflection activities.

Forum Theater: Use acting to depict a situation and then have students enter into the sketch to act out possible solutions. If students were watching a sketch on dysfunctional teams, have students brainstorm possible suggestions for how to improve the team environment. Then, ask for volunteers to try to act out the updated scene.

Group Evaluations: Similar to peer review, students may evaluate group presentations or documents to assess the quality of the content and delivery of information.

Hands-on Technology: Students use technology such as simulation programs to get a deeper understanding of course concepts. For example, students could use simulation software to design a radio antenna with the ultimate goal of understanding electromagnetism.

Informal Groups: Pose a question on which each group will work while you circulate around the room answering questions, asking further questions, keeping the groups on task, and so forth. After an appropriate time for group discussion, ask students to share their discussion points with the rest of the class.

Inquiry Learning: Students use an investigative process to discover scientific or engineering concepts for themselves. After the instructor identifies an idea or concept for mastery. A question is posed that asks students to make observations, pose hypotheses, and speculate on conclusions. Then students are enlisted to tie the activity back to the main idea/concept.

Interactions with Diverse People and Content: Students interact with individuals, perspectives, and content that does not represent the majority viewpoint. These interactions are intended to help build students' understanding of diverse cultures and global processes, as well as helping to foster intercultural skills.

Interactive Lecture: Instructor breaks up the lecture at least once per class to have all of the students participate in an activity that lets them work directly with the material. Students could observe and interpret features of images, interpret graphs, make calculation and estimates, etc.

Jigsaw Discussion: In this technique, a general topic is divided into smaller, interrelated pieces (e.g., the puzzle is divided into pieces). Each member of a team is assigned to read and become an expert on a different topic. After each person has become an expert on their piece of the puzzle, they teach the other team members about that puzzle piece. Finally, after each person has finished teaching, the puzzle has been reassembled and everyone in the team knows something important about every piece of the puzzle.

Large Group Discussion: Students discuss a topic in class based on a reading, video, or a problem. The instructor may prepare a list of questions to facilitate the discussion.

Learning Community: Students place course material into a broader context, give them a social network and support, expose them to new experiences, and develop their critical thinking skills. Learning communities usually feature small group interaction, common intellectual experiences, and mentorship from peers and faculty.

Low-stakes writing: Low stakes writing is writing that promotes fluency in expressing ideas and engagement in course concepts, helps students reflect on and learn major course concepts, and gives students an opportunity to practice. It does not count for a major portion of the final grade. Typically, in low-stakes assignments ideas are given prominence over correctness. While there is instructor feedback, it focuses mostly on content.

Minute Paper: At an appropriate point in the lecture, ask the students to take out a blank sheet of paper. Then, ask the topic or question you want students to address; for example, "*Today, we discussed conductive heat transfer. List as many of the principal features of this process as you can remember. You have one minute – go!*"

Peer Review: Students are asked to complete an individual homework assignment or writing assignment. Before the assignment is due, students bring a copy to class to share with a partner or a peer review group. Following a rubric or other instruction from the instructor, the peer group or partner provides critical feedback that students can sue to revise their work. This can be done using Turnitin.com or Peerceptiv in Canvas.

Role Playing: Here students are asked to "act out" a part. In doing so, they get a better idea of the concepts and theories being discussed. Role-playing exercises can range from the simple to complex. Example: "What would you do if a client rejects your engineering design concept based on the cost and usability of the product?"

Self-Assessment: Students receive a quiz (typically ungraded), a checklist of ideas, or a rubric to determine their understanding of the subject. Concept inventories or similar tools may be used at the beginning of the semester or the chapter for students to help students identify their misconceptions.

Service or Community-Based Learning: Students work with community partners to obtain direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. Students have to both apply what they are learning in real-world settings and reflect in a classroom setting on their service experiences with their instructor.

Study Abroad: Students travel abroad with an instructor and learn while immersed in the local culture. These excursions typically range between a few weeks and a full semester.

Think-Pair-Share: Have student's first work on a given problem individually, then compare their answers with a partner and synthesize a joint solution to share with the class.

Undergraduate Research: Participating in undergraduate research allows students to learn more about their future professional field, to participate in a scholarly community of like-minded students, and to develop a close working relationship with acclaimed faculty that can lead to scholarships, internships, jobs, international opportunities and admission to top graduate and professional programs.

Writing-Intensive Course: Students are required to practice writing intended for audiences within their discipline. This may include expert and non-expert audiences. There is formative feedback on the students' writing, either from peers or the instructor or both, and students revise based on the formative feedback. There is instruction in writing.

Adapted from:

Active learning, n.d.; Felder & Brent, 1994; Felder & Brent, Fall 2003; Felder & Brent, Summer 1994; Paulson & Faust, n.d.).

Chris O'Neal and Tershia Pinder-Grover, Center for Research on Learning and Teaching, University of Michigan

Institute for Writing and Rhetoric. (2014, April 4). *Teaching argument.* Retrieved from https://writing-speech.dartmouth.edu/teaching/first-year-writing-pedagogies-methods-design/teaching-argument

Paul, R., & Elder, L. (2016). *The miniature guide to critical thinking: Concepts & tools*. Dillon Beach, CA: Foundation for Critical Thinking.

PHC Ventures. (2013). *The DEAL model for critical reflection*. Retrieved from https://curricularengagement.com/handouts/

The Foundation for Critical Thinking. *Defining critical thinking.* Retrieved from https://www.criticalthinking.org/pages/defining-critical-thinking/766

Reflection after completing Student Learning Experience Design (SLED)

Summarize specific plans for the course or syllabus as a result of completing sections or the entire SLED:

What follow up questions do you have?

NOTE: The completed Student Learning Experience Design (SLED) can be included in your annual report as evidence of professional development. Peer feedback on the completed SLED from a mentor can also be included in reporting. Connecting the completed SLED to course practices and evidence of student success in your course helps document your impact in teaching.

See Appendix III: Evidence Supporting Performance in Teaching of the 2019-2020 University Promotion & Tenure Guidelines for a list of questions to inform the use of the SLED as an indicator of evidence-based teaching practice.

Notes: