

## **What is a Course Learning Outcome (CLO)?**

**Course learning outcomes are the “big ideas,” skills, or competencies students should be able to articulate, put into action, or utilize (theoretically or pragmatically) after their course experience.** As a general institutional practice, at MJC, the OAW has recommended that faculty construct 2-3 CLOs per course.

**What is the difference between a course “objective” and a “course learning outcome” (CLO)?** When faculty construct or adjust their curriculum, performing what is known as a “course outline of record” update, part of the process includes affirming both the course *objectives* and the course learning *outcomes*. Sometimes, the difference between objectives and outcomes can be difficult to discern, as they both play an important role in the learning process.

The ASCCC has written an “SLO Terminology Glossary” to help local academic senates and faculty in understanding and communicating the lexicon of assessment. In this glossary, the difference between objectives and outcomes is made as follows:

- **Objectives** are small steps that lead toward a goal; for instance, the discrete course content that faculty cover within a discipline. Objectives are usually more numerous and create a framework for the overarching Student Learning Outcomes which address synthesizing, evaluating and analyzing many of the objectives.
- **Student learning outcomes** are the specific observable or measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. An SLO refers to an overarching outcome for a course, program, degree or certificate, or student services area (such as the library). SLOs describe a student's ability to synthesize many discrete skills using higher level thinking skills and to produce something that asks them to apply what they've learned. SLOs usually encompass a gathering together of smaller discrete objectives (see definition above) through analysis, evaluation and synthesis into more sophisticated skills and abilities.

CLOs, then, comprise the *measurable* evidence of student learning that occurs as a result of taking classes through Modesto Junior College. The CLOs for any given course are expected to be attained when students are successful, and they are the skills, competencies, or “big ideas” faculty want students to comprehend and utilize during and after their learning experience.

**Where are CLOs stored, and are they publicly accessible for students and the community?**

CLOs for each course can be found in three locations:

- *First, CLOs are primarily housed in BTTC's curriculum management database, **CurricUNET**. Any additions, changes or assessments of CLOs take place via CurricUNET, as it is the primary source for SLOs and assessment at BTC. CLOs are also stored and assessed in **eLumen**.*
- *Second, all CLOs are **publicly accessible** for students and our community in **PiratesNet**: after each course description, corresponding CLOs are listed.*

The screenshot shows a web browser window with the URL [media.mjc.edu/classsearch/CourseInfo.aspx?SEC\\_ID=112165](http://media.mjc.edu/classsearch/CourseInfo.aspx?SEC_ID=112165). The page displays 'Course Learning Outcomes' for a course, with a blue box highlighting the text: 'Upon satisfactory completion of this course, the student should be prepared to: 1. Read and think critically; 2. Select credible sources; 3. Legitimately use scholarly sources by A) summarizing, paraphrasing, quoting, and documenting according to MLA conventions, B) integrating source ideas with their own ideas, and C) avoiding plagiarism; 4. Write papers that demonstrate competent control over written language, academic form, style, and tone.' Below this, 'Important Dates' are listed: Refund Date: 05/10/2017, Drop without 'W' Date: 05/10/2017, Pass No Pass Date: 05/14/2017. To the right, a table lists course sections with columns for 'Location', 'Type', 'Times', 'Days', 'Max/Avail', and 'Status'. The table includes sections for courses like MFND 274, MSER B207, MFND 251, MSER B203, MSER B204, MFND 237, MFND 253, MFND 274, MSER B208, MFND 235, MFND 272, MFND 255, MSCC 351, MSER B208, MFND 255, MFND 254, and MENGL-101.

*In PiratesNet, all CLOs are publicly accessible for prospective and current students. Above is an example from ENGL 101: Basic Composition & Reading.*

- *Third, faculty must include current CLOs on all course syllabi. Syllabi are provided for students at the beginning of their class, and all current syllabi are stored in their respective divisions.*

## **How are CLOs written?**

At BTTC, CLOs begin with a standardized phrase adopted by the OAW and the Academic Senate:

*As a result of satisfactory completion of this course, the student should be prepared to:*

What happens after this phrase is the responsibility of discipline faculty, and all CLOs should be entered into CurricUNET *and* eLumen (and double-checked in PiratesNet for their currency). Full-time faculty should construct and agree on the CLOs for the courses they offer and teach. Part-time faculty should be part of the conversation and informed of the current CLOs, as they will be also be assessing the outcomes for their classes! Here are some keys to constructing useful CLOs:

- **Use Bloom's Taxonomy!** When creating and modifying CLOs that capture the “big ideas” of a course, faculty should draw on Bloom's Taxonomy action verbs. The original 1956 *Taxonomy of Educational Objectives* identified six major categories of cognitive skills and abilities, including knowledge, comprehension, application, analysis, synthesis and evaluation. It also identified affective and psychomotor domains of learning. While the 1956 version has since been a bit revised, what is important are the key words and verbs that can be associated with different levels and evidence of learning complexity. There are several internet websites that can aid in providing lists of verbs to use in building outcomes.
- **Make them measurable.** Generally, CLOs and all SLOs need to be measurable: they should be able to be assessed in a way that provides qualitative and quantitative data. Faculty should be able to report how many students assessed were successful (quantitative data), and faculty should be able to provide narrative of the results, including a description of the assessment context (qualitative data). Both kinds of data will aid in a comprehensive analysis and interpretation of the assessment, as well as evidence of student learning.
- **Plan for authentic assessment.** The BTTC defines authentic assessment as something that “simulates a real world experience by evaluating the student's ability to apply critical thinking and knowledge or to perform tasks that may approximate those found in the work place or other venues outside of the classroom setting.” Such a definition indicates that the best kinds of assessment may not merely be multiple choice questions on a test; at BTTC, we aim to assess CLOs through scenarios that engage critical thinking, conceptual understanding, and active production.

## **What are some useful examples of CLOs being assessed at BTTC?**

### **Philosophy 101**

*As a result of satisfactory completion of this course, the student should be prepared to:*

1. Analyze and evaluate the issues and possible solutions to the “Great Questions” asked by philosophers
2. Synthesize a world view based on an array of the possible solutions to the “Great Questions” asked by philosophers.
3. Construct arguments in support of, and in opposition to, the world views generated by the possible solutions to the questions asked by philosophers.

### **Student Services: Academic renewal Workshops**

Students will be able to identify the requirements and the process of the Academic Renewal by attending a workshop and taking part in a pre and post survey.

### **WELD 204 Gas Metal Arc Welding & Flux Core Arc Welding**

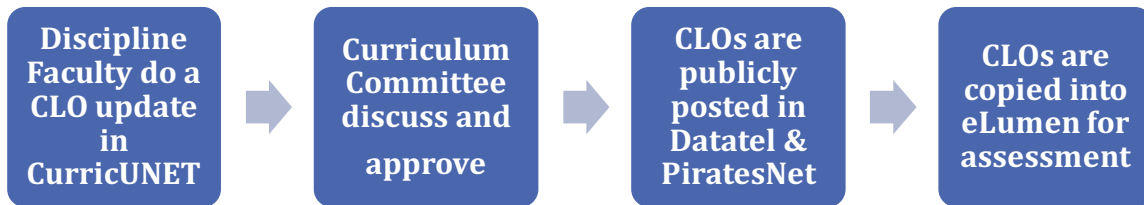
Upon satisfactory completion of this course, the student should be prepared to:

1. Select and adjust controls on a constant voltage power source for Gas Metal Arc Welding and Flux Core Arc Welding applications and create welds on both ferrous and non-ferrous metals.
2. Identify and select Gas Metal Arc Welding and Flux Core Arc Welding electrode wire according to American Welding Society identification codes for welding applications on both ferrous and non-ferrous metals.

**How can CLOs be modified or changed to make them better?**

CLOs should be periodically examined throughout the assessment and curriculum update processes. If faculty agree on modifications, changes can occur in two ways.

**CLO Update.** If the course outline of record does not need any changes, faculty can perform a “CLO update only” inside of [CurricUNET](#). The process begins with launching a “CLO Update Only,” followed by a review and approval by the Curriculum Committee, in its role as a committee of the Academic Senate. The CLOs are posted publicly in [PiratesNet](#) through Datatel and ready for input and assessment by faculty in [eLumen](#).



**Curriculum Update with CLO modification.** Discipline faculty must perform a “curriculum update,” or review and submission of an updated course outline of record (COR) every five years. During this process, faculty must affirm or modify their corresponding CLOs inside of [CurricUNET](#). This process begins with launching a “COR Update,” followed by review and approval by the Curriculum Committee, in its role as a committee of the Academic Senate. Curriculum is also forwarded to the Board of Trustees for approval. The CLOs are posted publicly in [PiratesNet](#) through Datatel and ready for input and assessment by faculty in [eLumen](#).



## **What can we learn from the assessment of CLOs?**

**One of the primary goals of CLO assessment is to provide insight about how learning might improve in a given course whether it be online, in a classroom, or happening in another context.**

- **Dialogue and analysis is central to the process.** At BTTC, there are some courses that have only one section, and many courses that have multiple sections taught by full-time and part-time faculty. When a course is scheduled for assessment, all sections of the course must be assessed, so this requires departmental planning and conversation

Assessing CLOs and talking about them especially in department meetings or as a group of faculty who teach a particular course is to converse about the outcomes of a course and to strategize ways to improve equity and student success.

- What kinds of instructional styles, methods, or activities are working for faculty in the classes?
- What are some of the obstacles?
- Where or when are students having problems with the material?
- What might help students be more successful?
- What kinds of resources might be needed?
- Are there differences in student achievement rates and SLO rates?

Broad dialogue across the college, and throughout our governance bodies, is a key feature of the SLO process at BTTC. The Outcomes Assessment workgroup is charged with helping facilitate dialogue about SLOs that lead to institutional improvement and student success.

- **Data disaggregation is key.** Data disaggregation is central to the college focus on equity and success. The building of longitudinal data for SLOs will allow departments to analyze disaggregated learning data in Program Review, including how different populations are doing (e.g., across ethnicity, gender, face-to-face vs. distance education, etc.).
- **Analyze, plan, and evaluate curricular or pedagogical changes to improve student success at the course level.**

After the inputting of data for course learning outcomes, instructors have the ability to analyze their outcomes. Individual instructors and departments can strategize curricular or pedagogical modifications to increase student learning and success, and can evaluate the previous course. This is an important step in continuous quality improvement. Modifications and strategies at the course level should be included in program review for continuing analysis.

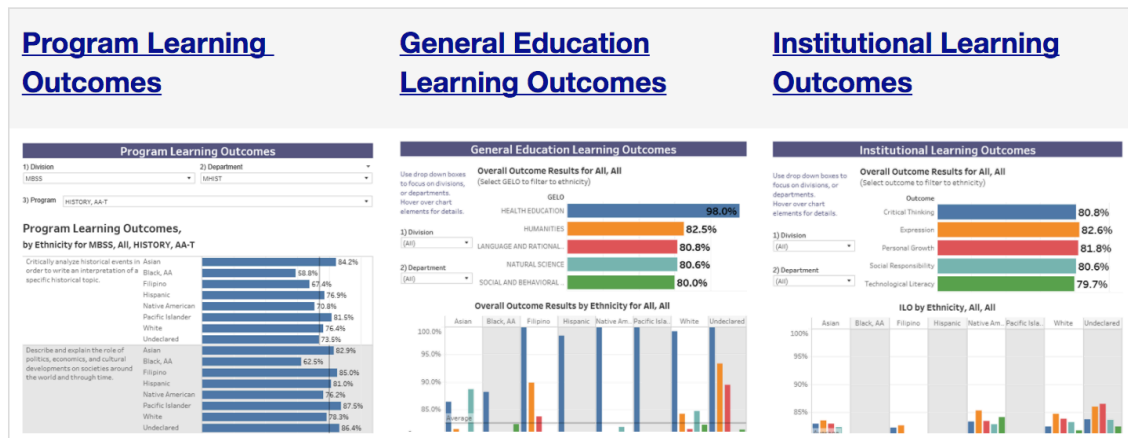
- **CLOs provide us with foundational data that can help us make better institutional decisions.**

CLOs and their assessment provide different data than student achievement rates. CLOs help to inform faculty what students are learning in the classroom, and provide a measure of the quality of learning at BTTC.

Our CLOs are mapped to inform our program learning outcomes (PLOs), general education learning outcomes (GELOs), and institutional learning outcomes (ILOs). The data from CLOs provides us with a lens on how we are doing in terms of our program, general education, and institutional learning. These measures are used in program review and institution-wide reports (such as our data dashboard) to inform the college and our community on the quality of student learning on our campus.

By incorporating SLOs into the program review and embedding discussions about disaggregated institutional data, we can make more informed decisions and provide resources to improve student learning.

## Instructional Learning Outcomes Data



*BTTC utilizes data dashboards that include disaggregated SLO data.*  
<http://www.bttc.co.in>