

Merced College (MCCD) Blooms Taxonomy List

In accordance with MCCD Resolution 06-13 (SLO Guidelines, 2013)

- All Student Learning Outcomes (SLOs), and specifically two thirds (2/3) of SLOs for Transfer Level Courses, should utilize one (1) verb per SLO from the Critical Thinking section(s) of the MCCD approved Bloom Taxonomy List.
- Faculty may utilize alternative verbs (i.e., a verb that does not appear on the MCCD approved list) if rationale is approved by the SLO Coordinator(s). Inconclusions, can be heard at the Curriculum Committee (CC) for final decision.
- It is the charge of the Curriculum Committee to review, revise, and approve MCCDs Blooms Taxonomy List annually (i.e., May CC meeting of every academic year).

VERBS REQUIRING *COGNITIVE* OUTCOMES

SIMPLE →

COMPLEX

			Critical Thinking		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define discover duplicate enumerate identify inquire label list locate match memorize name omit quote read recall recite record repeat reproduce retell select state tabulate know	associate ask change cite comment convert defend demonstrate discuss explain express extend generalize give example group illustrate indicate interpret paraphrase rearrange recognize represent report research restate review rewrite tell trace transform translate comprehend	act upon administer apply articulate chart collect complete compute conjugate demonstrate determine discover dramatize draw employ establish facilitate generalize interview manipulate modify operate paint practice prepare reconstruct report schedule shop show simplify sketch solve stimulate teach transfer use write	analyze appraise attribute breakdown calculate categorize check classify connect contrast correlate debate deconstruct deduce describe devise diagram differentiate discriminate dissect distinguish divide envison examine experiment focus infer inspect integrate inventory outline perceive point out prioritize put into list question relate select separate solve structure verify subdivide survey test diagnose validate visualize	arrange assemble collabora te collect combine compile compose concoct construct create design develop formulat e graph hypothesi ze ideate invent organize originate plan produce propose set up synthesi ze	appraise argue assess choose compare conclude consider convince criticize critique decide defend editorialize estimate evaluate find errors grade judge justify measure order persuade predict rank rate recommend reframe relate revise score select summarize support value weigh

Knowledge Recall involves remembering previously learned material. **Comprehension** involves grasping the meaning of the knowledge being learned and being able to paraphrase or explain it.

Application involves the ability to use learned information and materials. **Analysis** involves the ability to break material down into its elements or parts so that its organizational structure may be understood.

Synthesis involves the ability to combine previous experience with new material to form a structure. **Evaluation** involves the ability to make or defend judgments based on internal criteria or external evidence.

VERBS REQUIRING *AFFECTIVE* OUTCOMES

SIMPLE → COMPLEX

			Critical Thinking	
Receiving	Responding	Valuing	Organizing	Characterization
accept attend develops realize receive recognize	behave complete comply cooperate enjoy examine obey observe respond tolerate	balance believe defends devote examine prefer pursue seek value	codify discriminate display favor judge order organize relate systematize weigh	Internalize check

Receiving involves awareness, willingness to receive, and controlled attention.

Responding involves compliance in reacting to a suggestion, willingness to respond, and satisfaction in response.

Valuing involves accepting a value as a belief, indication of preference for the value, and commitment.

Organizing involves conceptualization of a value in abstract or symbolic terms and organization of a value system.

Characterization involves the individual acts consistently in accordance with the values he/she has internalized.

VERBS REQUIRING *PSYCHOMOTOR* OUTCOMES

SIMPLE → COMPLEX

				Critical Thinking	
Perception	Preparation	Orientation	Pattern	Performance	Origination
distinguish hear recognize relate see sense smell taste touch	physical-adjust locate place position prepare	copy demonstrate determine discover duplicate imitate inject repeat	adjust build illustrate indicate manipulate mix set up	adapt build change Develop check supply calibrate coordinate maintain operate operate role-play perform detect monitor	construct create design Produce make

Perception involves sensitivity to a situation object, or relationship that normally leads to action.

Preparation involves readiness to perform.

Orientation involves the discovery and/or decision of the response(s) which must be made.

Pattern involves a learned response that is habitual; presentation is smooth and the presenter has confidence in his ability.

Performance involves a complex motor action, carried out with a high degree of skill. (may be thought of as “motor synthesis”)

Origination involves the creation of new movement patterns to fit a particular situation or problem.

Bloom's Digital Taxonomy



Bloom's taxonomy	Bloom's modified taxonomy	Bloom's extended digital taxonomy	Functional Levels	Activities with digital tools	
		Sharing	Publicly sharing, publishing, broadcasting	Contributing to open social networks, publishing, broadcasting, networking	Higher Order Thinking Skills ↑
Evaluation	Creating	Creating	Designing, constructing, planning, producing, inventing, devising, making	Programming, filming, animating, blogging, video blogging, mixing, re-mixing, wiki-ing, videocasting, podcasting, directing	
Synthesis	Evaluating	Evaluating	Checking, hypothesising, critiquing, experimenting, judging, testing, detecting, monitoring	Blog commenting, reviewing, posting, moderating, collaborating, refactoring, testing	
Analysis	Analyzing	Conceptualizing	Comparing, organising, deconstructing, attributing, outlining, finding, structuring, integrating	Hacking, mashing, linking, validating, reverse engineering, cracking	
Application	Applying	Applying	Implementing, carrying out, using, executing	Running, loading, playing, operating, uploading, sharing with group, editing	
Comprehension	Understanding	Connecting	Interpreting, summarizing, inferring, paraphrasing, classifying, comparing, explaining, exemplifying	Boolean searches, advanced searches, blog journaling, tweeting, categorizing, tagging, commenting, annotating, subscribing	
Knowledge	Remembering	Doing	Recognizing, listing, describing, identifying, retrieving, naming, locating, finding	Bullet pointing, highlighting, bookmarking, group networking, shared bookmarking, searching	Lower Order Thinking Skills ↓

<https://www.fractuslearning.com/blooms-taxonomy-digital-print-table/>