MACOMB COMMUNITY COLLEGE

COURSE ASSESSMENT WORKBOOK

VERSION 1.1

The Center for
Teaching and Learning
Discover. Connect. *Advance.* SM

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Higher Learning Commission Accreditation Criteria for Assessment

The Higher Learning Commission (HLC) is an independent corporation which accredits degree-granting post-secondary educational institutions in the North Central Region of the United States. The HLC has set Criteria for Accreditation which is the standard of quality by which they determine whether an institution merits accreditation or reaffirmation of accreditation.

The HLC Criteria for Accreditation that focuses on Student Learning Assessment states:

Criteria 4.B. "The institution demonstrates a commitment to educational achievement and improvement through ongoing assessment of student learning."

1. The institution has clearly stated goals for student learning and effective processes for assessment of student learning and achievement of goals.

2. The institution assesses achievement of the learning outcomes that it claims for its curricular and co-curricular programs.

3. The institution uses the information gained from assessment to improve student learning.

4. The institution's processes and methodologies to assess student learning reflect good practice, including the substantial participation of faculty and other instructional staff members.

Assessment at Macomb

Assessment processes at Macomb offer an opportunity to shift focus from answering the question "How do we know that students have learned?" to the question "What are we doing to improve student learning?"

This shift allows for a rich and meaningful assessment project and provides opportunities for faculty discussion that lead to improving student learning. This formal and authentic approach to assessment allows us to shift focus from giving pre- and post-tests to implementing authentic assessments such as analyzing student artifacts that demonstrate their abilities.

Useful and Meaningful Course Assessment

Useful and meaningful course assessment begins when you ask a question about some aspect of student learning related to one of the course outcomes. To craft your assessment focus, first consider two preliminary questions:

> ## What should students be able to do as a result of this course?
> *Hint: Look for your answer in the course learning outcomes and objectives.*
>
> ## How well are students achieving this goal right now?

The answers to these questions will help you craft your assessment focus.

Once you've identified your focus, you can determine what student artifacts (evidence) to collect and examine. The results of your examination will give you insight into how to improve student learning in that area.

In the final steps of the process you will create a strategy that will improve student learning in that area, implement the new strategy, collect and examine evidence on its effectiveness, and continue to make refinements.

The Course Assessment Cycle

Course Assessment Process

- Plan the assessment
- Collect the evidence
- Examine the evidence
- Determine improvement strategy
- Implement improvement strategy
- Begin reassessment
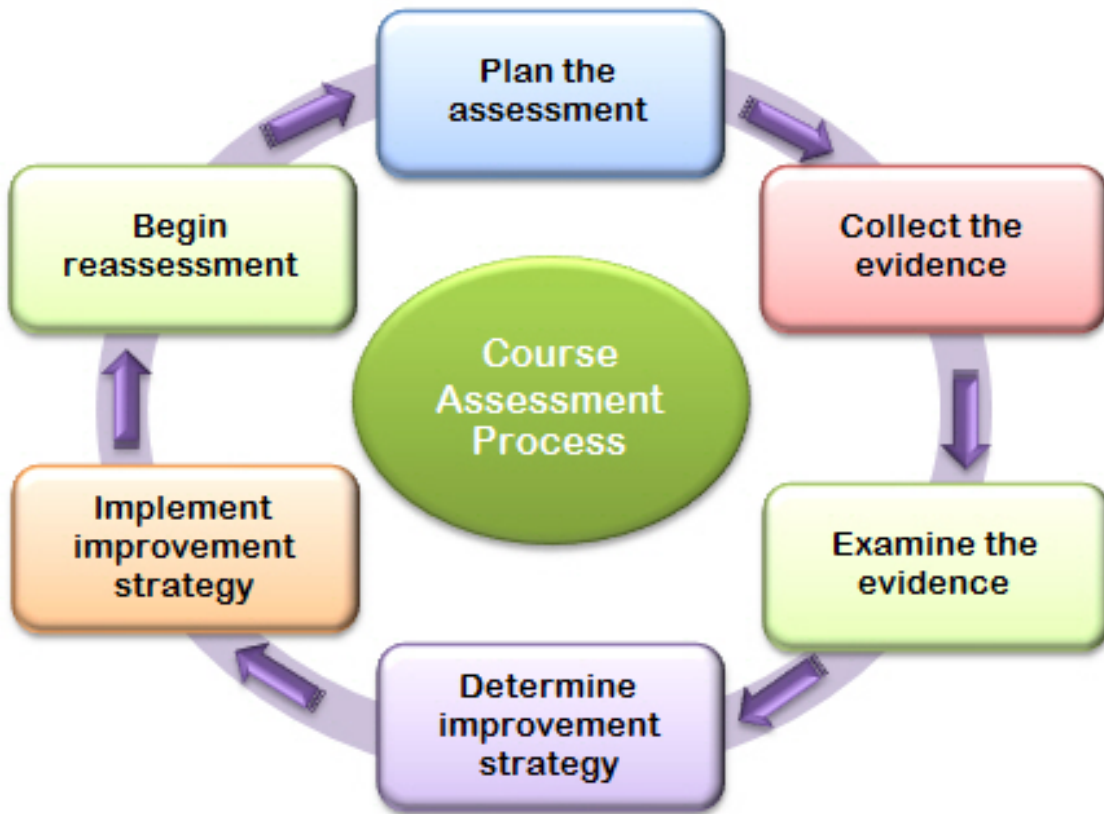
The Course Assessment Process

If you'd like assistance or have questions about the process, contact Academic Development in the Center for Teaching and Learning.

Mary Lou Kata, katam@macomb.edu

Deborah Armstrong, armstrongde@macomb.edu
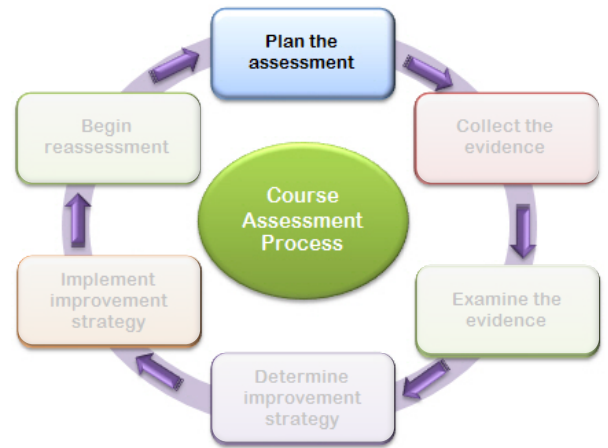
Plan the Assessment

1. Identify your course assessment focus

- Identify course outcome(s) that you'd like to investigate

_____

_____

- Identify the verb in that outcome(s) - this is the skill you will examine

_____

- Describe what students do in order to demonstrate their mastery of that skill

_____

_____

_____

Mary Lou Kata, katam@macomb.edu

Deborah Armstrong, armstrongde@macomb.edu

Contact CTL for help!

2. Determine what artifacts you will collect

- Student artifacts include student papers, project plans, check lists, programming code, presentation files, journals, exam items, etc. that demonstrate the outcome skill
- Draw the artifacts from assignments that are common across all course sections

What student artifacts will you collect?_____

_____

3. Determine which sections of the course to assess

- As a general guideline, if 10 or fewer sections of the course are offered, assess each section
- As a general guideline, if more than 10 sections of the course are offered, assess 10 sections + 20% of the total number of sections offered
  - e.g. if 20 sections of the course are offered, assess 14 sections (10 sections + 20% or 4)
- Plan to assess a variety of sections such as morning, afternoon, and evening sections, sections on both campuses *plus* virtual or hybrid sections

How many sections will you assess? _____

4. Determine when to collect the artifacts

- Plan on a semester for the full project

In what semester will you implement the assessment project? _____

5. Create the tools you'll need for collection

- Draft a rubric for assessing projects
- Write common exam questions for item analysis

The Office of Academic Development can help create a great rubric for you! If we help create your rubric, we'll also aggregate the data and provide you with a report of the results.

What tools will you create?_____

6. Inform affected faculty

- Inform full-time and adjunct faculty of timelines, tools, etc.

Collect the Evidence of Student Learning

1. Gather the artifacts

   - Communicate with all affected faculty to reinforce the importance of collecting student evidence
   - If necessary, make copies of artifacts if originals are returned to students
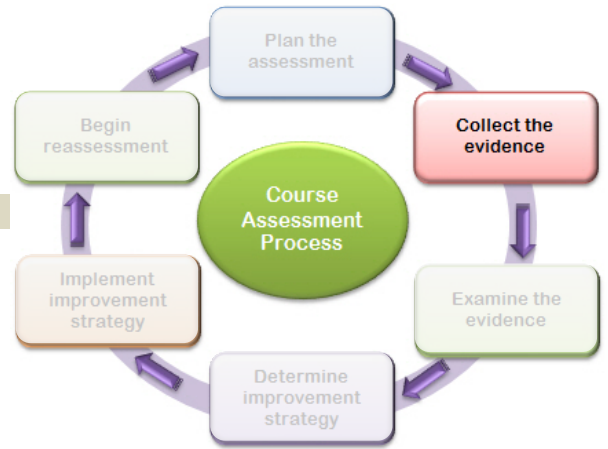
2. Write brief summary of methods and procedures for inclusion in your Action Plan

   Using bullet points and brief statements, draft a summary of your methods and procedures (number of sections, number of students, describe the artifacts)

   - _____

   - _____

   - _____

   - _____

   - _____

Examine the Evidence of Student Learning

1. **Use the assessment tool (e.g. rubric) to assess the artifacts**

   - Collect completed assessment tools from all participating full-time and adjunct faculty
   - Aggregate the data on your own or submit assessment tools to Academic Development for processing

   NOTE The Office of Academic Development can help create a great rubric for you! If we help create your rubric, we'll also aggregate the data and provide you with a report of the results.
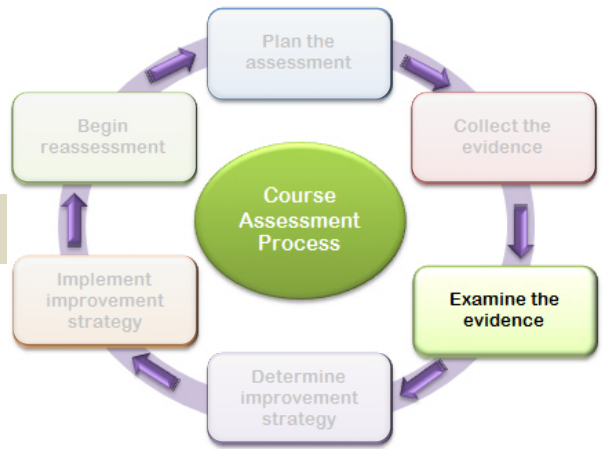
2. **Look for patterns**

   - List any consistent areas of strength

   _____

   _____

   - List any consistent areas of weakness

   _____

   _____

3. **Ask questions about the patterns**

   - Do you see identifiable trends in the data? If so, what are those trends?

   _____

   _____

   - Are there any surprises in the data? If so, describe what surprises you.

   _____

   _____

   - What do the data say about areas where student learning could be improved?

   _____

   _____

   _____

4. Share the assessment results with affected faculty

    •   List affected full-time and adjunct faculty

    _____

    _____

    _____

5. Write a brief summary of the artifacts and conclusions for inclusion in your Action Plan

Using brief statements, draft a summary of the evidence you collected and the conclusions you drew, for example, the number of artifacts collected, the percentage of students who did not meet expectations in one or more areas.

    _____

    _____

    _____

    _____

    _____

Determine the Improvement Strategy
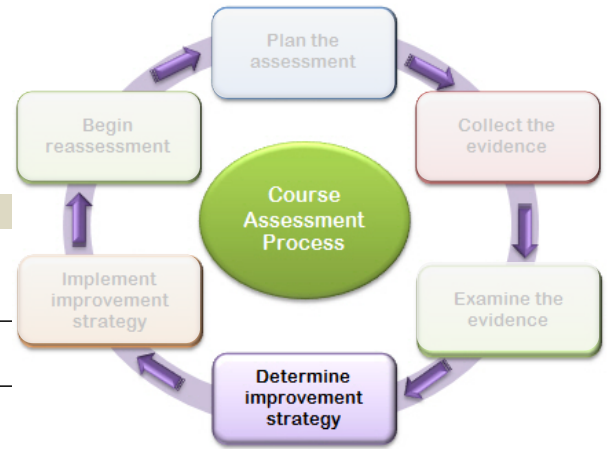
1. Where the data indicate a need for improvement:

   • Brainstorm ideas for improvement strategy

   _____

   _____

   _____

   _____

2. Determine one or two improvement strategies to implement (e.g. new assignment, additional lecture, increased student practice opportunities)

   • _____

   • _____

   • _____

3. Disseminate results and other information to all interested parties

   • Communicate with full-time and adjunct faculty and your associate dean
   • Provide improvement strategy details to full-time and adjunct faculty

4. Write a brief summary of the improvement strategy for inclusion in your Action Plan

   _____

   _____

   _____

5. Complete the Action Plan and submit to the Office of Academic Development in the Center for Teaching and Learning (S J-211-2 or calabresej@macomb.edu)

   • Submit a copy of your Action Plan to your Associate Dean for review
   • Submit a copy of your Action Plan to the Office of Academic Development in the Center for Teaching and Learning (S J-211-2 or calabresej@macomb.edu)

Implement the Improvement Strategy

1. Implement the new strategy in all course sections
    *   Draft a timeline for implementation
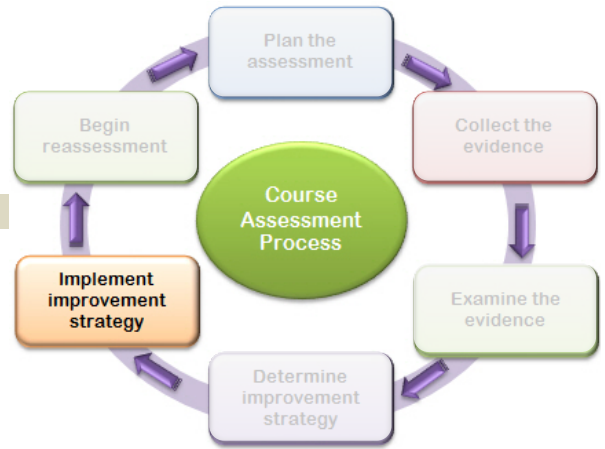
Begin Reassessment

1. Reassess to determine effectiveness of new strategy on student achievement

How to Design Rubrics

A rubric is a scoring tool that describes to students the specific criteria on which their assignment will be assessed. This same rubric can be used across multiple sections of a course to assess student artifacts for the purpose of course assessment.
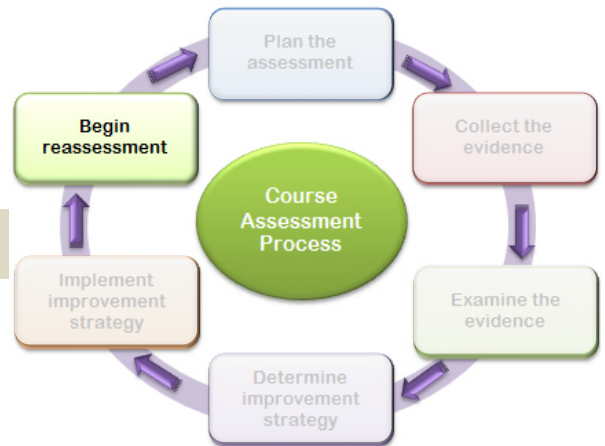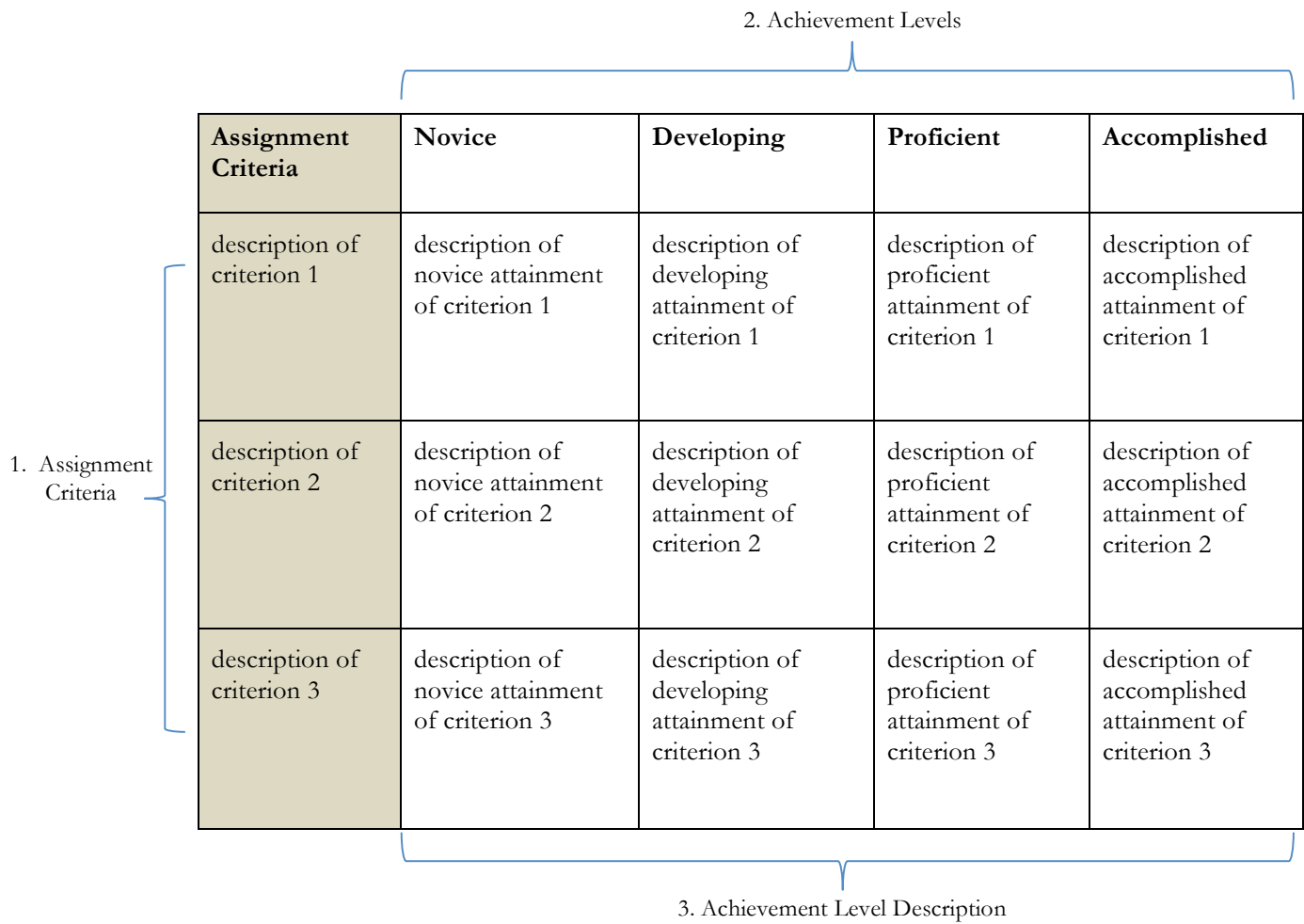
Three essential components of the assignment/project are identified in a rubric:

1. Assignment criteria

2. Achievement levels for each assignment criterion (e.g. novice, developing, proficient, accomplished)

3. Specific and detailed description of each achievement level for each assignment criterion

2. Achievement Levels

Assignment Criteria	Novice	Developing	Proficient	Accomplished
description of criterion 1	description of novice attainment of criterion 1	description of developing attainment of criterion 1	description of proficient attainment of criterion 1	description of accomplished attainment of criterion 1
description of criterion 2	description of novice attainment of criterion 2	description of developing attainment of criterion 2	description of proficient attainment of criterion 2	description of accomplished attainment of criterion 2
description of criterion 3	description of novice attainment of criterion 3	description of developing attainment of criterion 3	description of proficient attainment of criterion 3	description of accomplished attainment of criterion 3

1. Assignment Criteria

3. Achievement Level Description

STEP 1: Define the assignment criterion.
- Describe in concrete terms the specific skill/performance that will be assessed.

1.

2.

3.

4.

5.

6.

STEP 2: Define the achievement levels for each criteria.
- e.g. Novice, Developing, Proficient, Accomplished
- Include maximum point value for each level
- Consider using an even number of achievement levels

Level 1:

Level 2:

Level 3:

Level 4:

SETP 3: Write the description of each achievement level for each criterion.

- Use concrete terms to define the quality of the task/performance required to satisfy each achievement level
- Include maximum point value for each criterion achievement level

Assignment Criterion 1 – first achievement level

Assignment Criterion 2 – first achievement level

Assignment Criterion 3 – first achievement level

Assignment Criterion 1 – second achievement level

Assignment Criterion 2 – second achievement level

Assignment Criterion 3 – second achievement level

Continue writing assignment criterion descriptions for each achievement level in the rubric.

Generic Rubric Template

2. Achievement Levels

Assignment Criteria	Accomplished up to xx points	Proficient up to xx points	Developing up to xx points	Novice up to xx points
	xx points	xx points	xx points	xx points
	xx points	xx points	xx points	xx points
	xx points	xx points	xx points	xx points
	xx points	xx points	xx points	xx points
	xx points	xx points	xx points	xx points

1. Assignment Criteria

3. Achievement Level Description

Sample Rubric

Assignment: Symbols, Heroes, Rituals - Images and Culture

Criterion	Accomplished *up to 75 points*	Proficient *up to 67 points*	Developing *up to 59 points*	Novice *51 points or fewer*
Accurately identified and described the image	Accurately identified and described 6 images up to 15 points	Accurately identified and described 5-4 images up to 14 points	Accurately identified and described 3-2 images up to 13 points	Accurately identified and described 1 or fewer images 12 points or fewer
Carefully and accurately associated the image with a concept	Each image (6) was carefully and accurately associated with a concept up to 15 points	5-4 images were carefully and accurately associated with a concept up to 14 points	3-2 images were carefully and accurately associated with a concept up to 13 points	1 or fewer images were carefully and accurately associated with a concept 12 points or fewer
Clearly and convincingly explained how the image expresses the concept	Clearly and convincingly explained how each image (6) expressed the concept up to 20 points	Clearly and convincingly explained how 5-4 images expressed the concept up to18 points	Clearly and convincingly explained how 3-2 images expressed the concept up to 16 points	Clearly and convincingly explained how 1 or fewer images expressed the concept 14 points or fewer
Clearly and convincingly explained what the image says about what the culture values	Clearly and convincingly explained what each image (6) says about what the culture values up to 25 points	Clearly and convincingly explained what 5-4 images say about what the culture values up to 21 points	Clearly and convincingly explained what 3-2 images say about what the culture values up to 17 points	Clearly and convincingly explained what 1 or fewer images say about what the culture values 13 points or fewer

How To Write Learning Outcomes

Learning Outcomes

A learning outcome is a broad general statement of what the students will be able to do as a result of what they have learned in the course. Learning outcomes use language that allows the faculty member to *observe* and *measure* what students have learned based on what they can do. If you can't observe what a student can do to demonstrate their mastery of course content, how can you measure it? If you can't measure what students can do, how can you assess it? This is why incorporating action verbs in outcome statements is so important. You can observe and measure "calculate" and "identify" and "critique" but how can you observe and measure "understand" or "know" or "appreciate"?

Below are examples of weak learning outcome statements and strong learning outcome statements.

Weak Learning Outcome Statement	Strong Learning Outcome Statement
The student will *understand* the importance of cell growth and reproduction.	The student will be able to *explain* the importance of cell growth and reproduction.
The student will *know* about hydraulic break systems.	The student will be able to *service* hydraulic break systems.
The student will *appreciate* a work of 20th century British sculpture.	The student will be able to *analyze* the form and content of a work of 20th century British sculpture.

The element that distinguishes a weak outcome from a strong outcome is *the verb used*. Consider this: as a faculty member, you can observe and measure *explain*, *service*, and *analyze*, but what do *understand*, *know*, and *learn* look like?

Fuzzy Outcome Statements – Try This:

Circle the fuzzy verb and rewrite:

1. Students will demonstrate an understanding of how to solve an algebraic equation.

2. Students will appreciate a poem.

3. Students will be familiar with terms and vocabulary.

4. Students will know about the nutritional needs of older adults.

5. Students will demonstrate knowledge of business ethics.

Look at one of your program learning outcomes and identify the verb. Write that verb in the left column below. In the right column write 2 or 3 verbs that make student attainment of that outcome more visible and measurable.

Original Outcome Verb	3 Alternative Verbs
1.	1.
2.	2.
3.	3.

Supporting Objectives

Objectives are detailed specific statements of what the students will do in order to master the learning outcomes. Like learning outcomes, objectives use action verbs that describe measurable and observable behavior, but the verbs used in objectives are more specific than those used in learning outcomes. Consider the objectives that support the following learning outcomes:

> OUTCOME: Upon completion of this course, students will be able to **design** a network plan.
>
> OBJECTIVES:
> - <u>Analyze</u> client requirements
> - <u>Write</u> an environmental analysis
> - <u>Configure</u> networking hardware

As a general rule, write four to six learning outcomes and two to five objectives that support each outcome.

Bloom's Taxonomy

Bloom's Taxonomy is a categorization of cognitive learning skills, arranged hierarchically from the most basic (Remembering) to the most complex (Creating).

Remembering	Understand	Applying	Analysis	Evaluating	Creating
Cite	Generalize	Restructure	Breaks down	Appraise	Arrange
Define	Illustrate	Sketch	Analyze	Interpret	Modify
Describe	Recognize	Solve	Categorize	Argue	Assemble
Duplicate	Report	Use	Correlate	Assess	Categorize
Identify	Interpret	Write	Examine	Attach	Collect
Label	Locate	Administer	Experiment	Choose	Combine
List	Restate	Articulate	Focus	Compare	Compose
Match	Summarize	Contribute	Illustrate	Conclude	Construct
Name	Translate	Establish	Infers	Critique	Create
Order	Articulate	Implement	Limits	Defend	Derive
Outline	Associate	Include	Outline	Determine	Design
Quote	Characterize	Instruct	Prioritize	Discriminate	Develop
Recite	Approximate	Participate	Appraise	Judge	Plan
Recognize	Paraphrase	Report	Calculate	Justify	Predict
Reproduce	Classify	Utilize	Separate	Estimate	Formulate
Select	Convert	Apply	Subdivide	Evaluate	Generate
State	Confirm	Organize	Test	Infer	Invent
Tabulate	Conclude	Calculate	Categorize	Measure	Prepare
Trace	Estimate	Choose	Classify	Predict	Produce
	Explain	Classify	Compare	Rate	Propose
	Distinguish	Collect	Contrast	Recommend	Rearrange
	Differentiate	Compute	Criticize	Relate	Reconstruct
		Demonstrate How To	Survey	Summarize	Rewrite
		Develop	Separate	Support	Set up
		Exhibit	Infer	Validate	Synthesize
		Generalize	Inquire	Value	
		Make	Dissect	Weigh	
		Predict			
		Prepare			
		Manipulate			
		Modify			
		Operate			
		Produce			
		Relate			

Retrieved from https://adp.uni.edu/documents/bloomverbscognitiveaffectivepsychomotor.pdf*, March 9, 2018.*

Verbs to Avoid when Writing Learning Outcomes

Believe	Know	Comprehend	Understand
Feel	Demonstrate knowledge	Think	See

Definitions

Action Plan: a completed document that reports on assessment methods, findings, and recommendations of the assessment project.

Artifacts: The papers, projects, presentations, demonstrations, etc., that student's produce that reflect their attainment of a student learning outcome(s).

Assessment: A continuous process that involves "…the systematic collection of information about student learning…in order to inform decisions about how to improve learning" (*Walvoord, B.E, 2010, p. 2).*

Assessment Tool: The means (instrument used) to measure achievement of learning outcomes reflected in an artifact.

Bloom's Taxonomy: A categorization of cognitive learning skills, arranged hierarchically from the most basic (Remembering) to the most complex (Creating).

Course: "An organization of subject matter and interrelated learning experiences with unique identifying information attached" (The Curriculum Process at Macomb Community College: A User's Guide, 2015).

Course Assessment: A faculty driven, continuous process meant to improve the quality of teaching and learning, which involves the systematic collection of artifacts at the course level to determine the extent to which students in all sections of a course have achieved Course Learning Outcomes.

Course Learning Outcome (CLO): A statement identifying the knowledge, skills, and attitudes the student will be able to demonstrate upon completing a course.

Evidence: An artifact that reflects a student's attainment of a student learning outcome.

Learning Outcome: A statement identifying the knowledge, skills, and attitudes the student will be able to demonstrate upon completion of the course or program of study.

Objective(s): Detailed specific statements of what the students will do in order to master the student learning outcomes.

Rubric: A scoring tool that identifies criteria for a student artifact and describes attainment levels for each criterion.

Resources

Before You Begin, You'll Need the Following
- Access to the Official Course Syllabus on Macomb.edu (see Appendix A)
- Course Action Plan form housed in the Assessment Resource Center (see Appendix B)
- Access to the Assessment Resource Center (see Appendix C)

Helpful Resources

Association for the Assessment of Learning in Higher Education (AALHE)
http://aalhe.org/

Higher Learning Commission
http://www.ncahlc.org/

North Carolina State University Internet Resources for Higher Education Outcomes Assessment
http://www2.acs.ncsu.edu/UPA/assmt/resource.htm

Rubric Design

Association for the Assessment of Learning in Higher Education – Assessment Rubrics
http://course1.winona.edu/shatfield/air/rubrics.htm

Rubric Samples for Higher Education
http://rubrics.kon.org/

University of Rhode Island Rubric Resources
http://www.uri.edu/assessment/uri/guidance/rubrics.html

References

Anderson, Krathwohl, Bloom, Anderson, Lorin W, Krathwohl, David R, & Bloom, Benjamin Samuel. (2001). A taxonomy for learning, teaching, and assessing : A revision of Bloom's taxonomy of educational objectives (Complete ed.). New York, NY: Longman.

Macomb Community College. (2015). The curriculum process at Macomb Community College: A user's guide. Retrieved on March 11, 2018 from https://my.macomb.edu/staff/president/policies/Policies/The%20Curriculum%20Process%20User%27s%20Guide.pdf

Mundhenk, R. & Fager, J. (2011). The landscape changes: Assessment, accreditation, and accountability. Assessment of Academic Achievement Conference Presentation. University of Wisconsin – Superior. January 18, 2011.

Walvoord, B. E. (2010). Assessment clear and simple: A practical guide for institutions, departments, and general education (2nd ed.). San Francisco, CA: Jossey-Bass.

Appendix A – View and Print the Official Course Syllabus
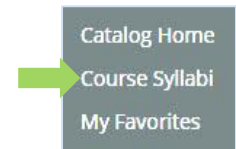
1. From the Macomb Community College Homepage click **Catalogs** on the left-side navigation pane.

2. At the College Catalog homepage select **Official Course Syllabi** from the drop-down menu located at the top-right.
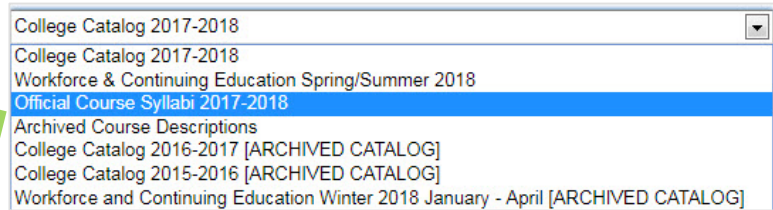
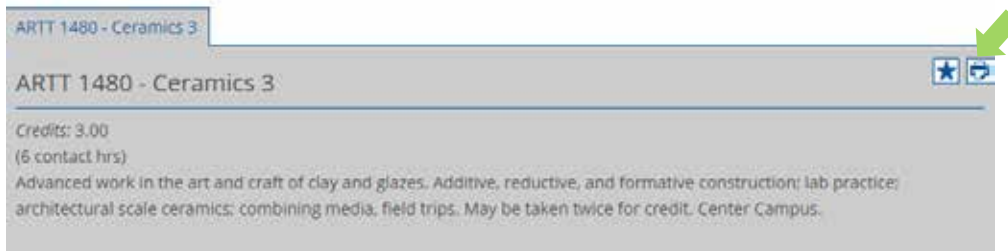3. At the Official Course Syllabi homepage click **Course Syllabi** on the left-side navigation pane.

4. At the Course Syllabi page select the course from the **Prefix** drop-down menu and click **Filter**.

5. At the list of courses click the **course number – title** to display your Official Course Syllabus.

6. When the Official Course Syllabus displays, click the **Printer** icon at the top-right.

7. When the Official Course Syllabus displays again, click the **Print this Page** link at the top-left of the page.

Appendix B – Course Action Plan Form (editable form available at the Assessment Resource Center)

Course Assessment Action Plan
Macomb Community College | Plans to Improve Student Learning

| (Course Name & Number) | (School Term & Year Data Collected) | (Faculty Name(s), Email Addresses) |

1. During the assessment time frame, how many:
    a. Artifacts were collected?
    b. Course sections and students were selected?

2. Using the table, please indicate what course outcomes were assessed. For each course outcome assessed provide information on the artifacts, assessment tools and findings. (Add columns as needed)

Course Outcome(s)	Artifacts & Assessment Tools (Describe evidence; i.e. course project, presentation, common exam, and tools; i.e. rubric, item analysis that were used to assess the course outcomes.)	Findings (Provide a brief analysis of results.)

Action Plan Form Revised 2017   1

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3. Based on your assessment results, please address the next steps in your improvement strategy:
    a. What action(s) will be taken?
    b. When will the action(s) be implemented?
    c. How do you anticipate the action(s) will impact student learning?
    (For the improvement strategy, please note specific changes that will be made to the course, including any curriculum revisions which could positively impact student learning and when those changes will take place. If no changes will be implemented, please provide a rationale.)

4. If known, when was this course last assessed and which outcomes were assessed at that time? How did your area make use of the results?
    (If known, please describe any changes that were made to improve student learning.)

After completing this form, please:

☐ Submit one copy to the Academic Development Department for inclusion into the Assessment Resource Center
    ○ Janet Calabrese, Assessment & Evaluation Coordinator (calabresej@macomb.edu)

☐ Submit one copy to your Dean and/or Associate Dean for departmental records

☐ Disseminate findings and actions to be implemented to improve student learning to appropriate internal and external parties (adjunct faculty, advisory boards, etc.)

Submitted by: Date:

Next Scheduled Assessment Semester:

Action Plan Form Revised 2017   2

Appendix C – The Assessment Resource Center

NOTE: The Assessment Resource Center is built on Microsoft SharePoint and so works best on a Windows computer with the **Internet Explorer browser**.

Access the Assessment Resource Center

Step 1. From the Macomb Community College homepage click **My Macomb**.

Step 2. At the My Macomb login page, enter your User ID and Password, and click **Sign In**.

Step 3. Click the **Assessment Resource Center** link located along the left side of the My Macomb portal page in the MCC Staff Bookmarks section.
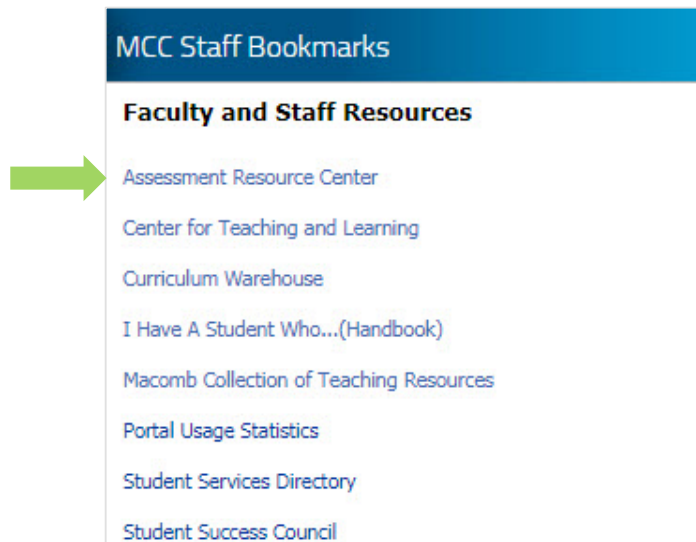
Need Help with Course Assessment?

Have Questions About How to Design Rubrics or Aggregate Data?

Academic Development Can Help!

Mary Lou Kata
katam@macomb.edu

Deborah Armstrong
armstrongde@macomb.edu

Nine Principles of Good Practice for Assessing Student Learning

1. The assessment of student learning begins with educational values.

2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.

3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.

4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.

5. Assessment works best when it is ongoing, not episodic.

6. Assessment fosters wider improvement when representatives from across the educational community are involved.

7. Assessment makes a difference when it begins with issues of use and illuminates questions that people really care about.

8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.

9. Through assessment, educators meet responsibilities to students and to the public.

Macomb Community College

Education • Enrichment • Economic Development

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