

McKendree University
Assessment 2.1
Learning Outcome: INQUIRY & PROBLEM SOLVING
Students will develop and apply analytical, critical thinking, and problem-solving skills.

Objective 1: Students will use mathematical reasoning to solve problems.

Assessment Instrument: Quantitative Literacy rubric
Participants: Students enrolled in general education courses fulfilling the mathematical reasoning requirement
Data Collected: Every semester
Data Aggregated: By academic year
Instrument Scale: 1 = Novice, 2 = Basic, 3 = Proficient, 4 = Advanced
Target Goal: Mean score of 2.00 or higher
Assessment Results:

	2017 - 2018		2018 - 2019		2019 - 2020		2020 - 2021	
Indicator	n	M	n	M	n	M	n	M
Interpretation	71	3.21	85	3.21	63	3.06	System improvements resulted in lack of data being obtained.	
Representation	36	3.11	59	3.17	35	2.74		
Calculation	73	3.30	93	3.03	63	3.24		
Communication	34	2.97	51	3.06	35	2.80		
Total	74	3.23	93	3.20	63	3.17		

Objective 2: Students will use computers to solve problems.

Assessment Instrument: Computer Literacy and Competency rubric
Participants: Students enrolled in general education courses fulfilling the computer competency requirement
Data Collected: Every semester
Data Aggregated: By academic year
Instrument Scale: 1 = Beginning, 2 = Low Intermediate, 3 = High Intermediate, 4 = Advanced
Target Goal: Mean score of 2.00 or higher
Assessment Results:

	2016 - 2017		2017 - 2018		2018 - 2019		2019 - 2020		2020 - 2021	
Indicator	n	M	n	M	n	M	n	M	n	M
Connecting	208	3.38	251	3.43	160	3.38	250	3.29	System improvements resulted in lack of data being obtained.	
Creating	207	3.48	260	3.48	160	3.38	581	3.71		
Abstracting	179	2.83	222	2.98	153	3.12	209	2.79		
Analyzing	204	3.05	203	2.97	159	3.10	542	3.16		
Communicating	201	3.01	249	3.53	161	3.54	280	3.38		
Total	223	3.16	261	3.28	307	3.40	1024	3.44		

Objective 3: Students will use the scientific method to evaluate the validity of information.

Assessment Instrument: Science and Nature rubric (Revised: 2019)
Participants: Students enrolled in general education courses fulfilling the science and nature requirement
Data Collected: Every semester
Data Aggregated: By academic year
Instrument Scale: 1 = Novice, 2 = Basic, 3 = Proficient, 4 = Advanced
Target Goal: Mean score of 2.00 or higher in lower-level courses and 3.00 or higher in upper-level courses
Assessment Results:

	2019 - 2020						2020 - 2021
	Lower Level		Upper Level		Total		
Indicator	n	M	n	M	n	M	
Distinguish science from other disciplines	74	3.74	0	N/A	74	3.74	System improvements resulted in lack of data being obtained.
Apply the process of scientific inquiry	193	2.87	0	N/A	193	2.87	
Accurately communicate (oral/written) scientific theories, concepts, and terminology	158	2.86	0	N/A	158	2.86	
Discriminate between scientific and societal controversy	74	3.49	0	N/A	74	3.49	
Total	312	2.83	0	N/A	312	2.83	

Significant Changes

2016-2017: Developed and implemented Quantitative Literacy, Computer Literacy and Competency, and Science and Nature rubrics.
 2019-2020: Revision of the Science and Nature Rubric