

Assessment of Program Student Learning Objectives (SLOs)
SLO Survey of Degree Applicants
Mathematics AS Degree
Summer 2012 – Spring 2014



Program SLO Statements

	# of Respondents	Agree Strongly	Agree	Disagree	Disagree Strongly	Mean Score
1. Demonstrate analytical thinking by: Breaking complex problems into manageable smaller problems	11	81.8%	9.1%	9.1%	0.0%	3.73
2. Demonstrate analytical thinking by: Identifying the relationships among verbal, symbolic, graphical and numerical representations within the same problem	11	81.8%	18.2%	0.0%	0.0%	3.82
3. Demonstrate analytical thinking by: Identifying what a problem is really asking	11	90.9%	9.1%	0.0%	0.0%	3.91
4. Demonstrate analytical thinking by: Solving non-algorithmic problems	11	72.7%	27.3%	0.0%	0.0%	3.73
5. Demonstrate resourcefulness in problem solving by: Choosing appropriate methods	11	72.7%	27.3%	0.0%	0.0%	3.73
6. Demonstrate resourcefulness in problem solving by: Recognizing and explaining source of errors and impossible solutions	11	72.7%	27.3%	0.0%	0.0%	3.73
7. Demonstrate resourcefulness in problem solving by: Synthesizing appropriate strategies, techniques or information from prerequisite courses	10	70.0%	30.0%	0.0%	0.0%	3.70
8. Demonstrate resourcefulness in problem solving by: Using alternative representations of mathematical ideas	11	81.8%	9.1%	9.1%	0.0%	3.73
9. Employ mathematical strategies with confidence	11	81.8%	9.1%	9.1%	0.0%	3.73
10. Synthesize ideas expressed in mathematical language by: Communicating arguments clearly	11	81.8%	18.2%	0.0%	0.0%	3.82
11. Synthesize ideas expressed in mathematical language by: Demonstrating a basic understanding of proof	11	81.8%	18.2%	0.0%	0.0%	3.82
12. Synthesize ideas expressed in mathematical language by: Demonstrating the ability to collaborate in problem solving (i.e. study groups, group projects)	10	60.0%	30.0%	10.0%	0.0%	3.50
13. Synthesize ideas expressed in mathematical language by: Demonstrating the ability to understand both written and spoken mathematics	11	81.8%	18.2%	0.0%	0.0%	3.82

Note: "Mean Score" is derived by assigning numeric values to each response (where 1="Disagree Strongly", 2="Disagree", 3="Agree", and 4="Agree Strongly") and calculating the mean of all responses for a given question item.

NOTE: The data presented here are derived from an online survey sent to all CSM degree applicants, Summer 2012-Spring 2014. Award earners are asked to indicate the extent to which they agreed with statements regarding student learning outcomes associated with their program.