

# Program SLOs Mathematics

A.S. Degree – Mathematics

A.S.-T Degree – Mathematics (A.S. for Transfer)

## Program Student Learning Outcomes From the 2015 PrOF (Program Review) Update

1	Program Student Learning Outcome (P-SLO)	<b>Numeracy</b>	Strengthen basic computational skills and number sense (numeracy).
2	Program Student Learning Outcome (P-SLO)	<b>Mathematical competency</b>	Apply mathematical terminology, symbols, operations, and problem-solving techniques in a variety of contexts and at a course-appropriate level.
3	Program Student Learning Outcome (P-SLO)	<b>Thinking skills</b>	Enhance the ability to think logically, critically, and abstractly.
4	Program Student Learning Outcome (P-SLO)	<b>Problem solving</b>	Develop problem-solving skills in mathematics that can be generalized to occupational and personal contexts.
5	Program Student Learning Outcome (P-SLO)	<b>Quantitative Reasoning</b>	Effectively organize, present, interpret and summarize quantitative information using symbolic, numerical and graphical methods.

### A.S – Mathematics – Student Learning Outcomes\*

<b>SLO 1</b> Explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real
<b>SLO 2</b> Explain and apply basic concepts of multivariable calculus, linear algebra, or differential equation techniques, their interconnections, and their uses in analyzing and solving real-world problems.
<b>SLO 3</b> Prepares logical arguments and use them to prove basic mathematical theorems.
<b>SLO 4</b> Solves real-world application problems using appropriate mathematical problem-solving skills.
<b>SLO 5</b> Use mathematics in the context of computer programming or statistics

### AS-T (A.S. for Transfer) – Mathematics – Student Learning Outcomes\*

<b>SLO 1</b> Explain and apply basic concepts of single variable calculus including various forms of derivatives and integrals, their interconnections, and their uses in analyzing and solving real-world problems.
<b>SLO 2</b> Explain and apply basic concepts of multivariable calculus, linear algebra, or differential equation techniques, their interconnections, and their uses in analyzing and solving real-world problems.
<b>SLO 3</b> Prepare logical arguments and use them to prove basic mathematical theorems.
<b>SLO 4</b> Solve real-world application problems using appropriate mathematical problem-solving skills.

\* Developed through the Curriculum Committee approval process.