Math 105 Course Outcomes

Updated Fall 2015

After successful completion of this course, students will be able to:

1. Apply learning
   1. Use mathematics and quantitative reasoning to solve problems
   2. Show appropriate mathematical mechanics and techniques
   3. Apply skills and abilities to new situations in and out of the classroom
   4. Demonstrate skills and proficiencies in algebraic manipulation and calculator use
2. Think critically
   1. Choose an appropriate solution strategy
   2. Construct a mathematical plan to solve a problem
   3. Determine the reasonableness and implications of mathematical solutions
   4. Recognize the limitations of mathematical models
3. Communicate effectively
   1. Clarify and explain thought process and solution
   2. Explain results orally and/or in writing
   3. Collaborate with others to solve problems effectively
   4. Interpret results and solutions
   5. Justify reasoning and solution
4. Engage diverse values with civic and ethical awareness
   1. Evaluate how various decisions would fit with personal values and civic awareness
   2. Practice decision-making in authentic settings with realistic numbers
5. Create ideas and solutions
   1. Reflect on successes, failures, and obstacles encountered in the problem-solving process
   2. Assess mistakes and rework solutions