## CCC Program Outcomes

## Math/Science Division-Math Program-Updated 1/26/15

Upon successful completion of the general education requirements and the suggested program requirements for an Associate Degree the student shall:

1. Use algebraic techniques to manipulate \& solve equations and inequalities.
2. Understand and use functional notation.
3. Graph functions in both Cartesian and polar coordinate systems.
4. Apply mathematical techniques to problems involving other disciplines and the real world.
5. Apply differential techniques to solving problems
6. Apply Integration techniques to solving problems
7. Solve different trigonometry identities.
8. Determine convergence or divergence of a series by using different tests for series.
9. Apply the technique of LaPlace transforms to solving differential equations.

| Course \# | Course Title | PO-1 | PO-2 | PO-3 | PO-4 | PO-5 | PO-6 | PO-7 | PO-8 | PO-9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH 105 | College Algebra | $\begin{aligned} & \text { Co 1, 2, 3, } \\ & 5 \\ & \hline \end{aligned}$ | Co 3, 4 | Co 3, 4, 5 | $\begin{aligned} & \hline \text { Co } 2,3, \\ & 4,5,6 \\ & \hline \end{aligned}$ |  |  |  |  |  |
| MATH 102 | Intermediate Algebra | $\begin{aligned} & \text { Co } 1,2,3 \text {, } \\ & 4,5,6,7 \\ & \hline \end{aligned}$ | Co 7, 8 | Co 7, 8 | Co 7, 8 |  |  |  |  |  |
| MATH 115 | Calculus I |  | Co 3 | Co 1 |  | $\begin{aligned} & \hline \text { Co } 4,5, \\ & 6,7,8 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Co } 10, \\ & 11,12 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Co } 14, \\ & 15 \\ & \hline \end{aligned}$ |  |  |
| MATH 120 | Calculus II |  | Co 13 | $\begin{aligned} & \text { Co 9, 10, } \\ & 11,12 \end{aligned}$ |  |  | $\begin{aligned} & \text { Co 4, 5, } \\ & 6 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Co 1, } \\ & 2 \end{aligned}$ | $\begin{aligned} & \hline \text { Co 7, } \\ & 8 \\ & \hline \end{aligned}$ |  |
| MATH 201 | Calculus III | Co 1, 2 | Co 1, 2 | $\begin{aligned} & \text { Co 1, 2, 3, } \\ & 4 \end{aligned}$ | Co 3, 4 | Co 6 | $\begin{aligned} & \text { Co 1, 2, } \\ & 3,5 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { Co } 1, \\ & 2,3 \\ & \hline \end{aligned}$ |  |
| MATH 106 | Trigonometry | Co 1, 7 | Co 3 | Co 8 | Co 8 |  |  | $\begin{aligned} & \hline \text { Co 4, } \\ & 5 \\ & \hline \end{aligned}$ |  |  |
| MATH 250 | Elementary Statistics |  |  |  |  |  |  |  |  |  |
| MATH 117 | Intro to Analytic Processes | Co 1, 2 | Co 1, 2 | Co 3 |  | Co 4 | Co 5 |  |  |  |
| MATH 202 | Differential Equations |  |  |  | Co 7 | Co 1, 2 | Co 1, 2 |  | Co 5 | Co 3 |

