

**MICS GE Learning Data**  
**30-May-14**

|        |             | Students will be able to formulate a mathematical model from a verbal description of a problem. | Students will be able to solve non-routine problems using logic and quantitative techniques. | Students will be able to construct solutions to problems using computational techniques. |
|--------|-------------|---|--|--|
| MTH144 | Spring 2010 | 3.27  | 3.17   | 3.37   |
| MTH144 | Spring 2011 | 2.05  | 1.88   | 3.10   |
| MTH144 | Summer 2011 | 3.67  | 2.83   | 3.50   |
| MTH144 | Spring 2012 | 1.79  | 2.77   | 3.46   |
| MTH144 | Spring 2013 | 3.68  | 2.66   | 3.24   |
| MTH144 | Spring 2014 | 2.19  | 2.80   | 3.93   |
| MTH164 | Fall 2009   | 2.92  | 2.85   | 1.62   |
| MTH164 | Fall 2010   | 2.48  | 2.52   | 1.24   |
| MTH164 | Fall 2011   | 1.30  | 2.93   | 3.02   |
| MTH164 | Fall 2012   | 3.50  | 3.28   | 3.80   |
| MTH164 | Fall 2013   | 3.35  | 2.80   | 3.68   |
| MTH303 | Fall 2007   | 2.19  | 3.14   | 2.22   |
| MTH303 | Spring 2008 | 3.32  | 2.82   | 3.42   |
| MTH303 | Fall 2008   | 3.63  | 3.30   | 3.50   |
| MTH303 | Spring 2009 | 3.37  | 3.07   | 2.93   |
| MTH303 | Fall 2009   | 2.78  | 2.78   | 3.22   |
| MTH303 | Spring 2010 | 3.16  | 3.26   | 3.61   |
| MTH303 | Fall 2010   | 3.28  | 2.73   | 3.55   |
| MTH303 | Spring 2011 | 2.66  | 2.79   | 2.96   |
| MTH303 | Fall 2011   | 3.02  | 3.23   | 3.25   |
| MTH303 | Spring 2012 | 2.69  | 2.95   | 2.71   |
| MTH303 | Fall 2012   | 3.22  | 2.70   | 2.48   |
| MTH303 | Spring 2013 | 3.54  | 2.89   | 2.74   |
| MTH303 | Fall 2013   | 2.95  | 2.97   | 2.93   |
| MTH303 | Spring 2014 | 2.85  | 2.65   | 2.83   |

**Scale Used:**

- 0 Unsatisfactory - Completely Incorrect
- 1 Low Satisfactory - Missed more than one key concept or step
- 2 Satisfactory - Missed one key concept or step
- 3 High Satisfactory - Made a minor error
- 4 Outstanding - Completely correct

**Criteria for Success:**      **Average sample score of 2.5 or higher for each problem**

**Comments:**

The question that we have been using to assess #1 for MTH144 and MTH164 has varied over time. It has produced inconsistent results. In 2012 we changed this question to an interest problem which more closely matches one of the questions in the MTH303 assessment for #1.

Some sections of MTH303 were hybrid in the Spring of 2014.