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| **Program/Discipline Learning Outcomes** | | | | |
| **Academic Year: 2017 - 2018** | | | | |
| **Program/Discipline: (indicate program/discipline here)**  Certificate in Fundamentals of Engineering | | | | |
| **PROGRAM/DISCIPLINE CONTACT** | | | | |
| **FACULTY: Greg Severance** | | | **OFFICE: JM 250** | |
| **EMAIL: severangrege@jccmi.edu** | | | **PHONE: 796 - 8489** | |
| **Learning Outcome:**  **(Successful students will be able to)** | | **Course(s) in which the assessment will be performed** | **Semesters the outcome will be assessed** | **Assessment tools used for learning outcome** |
| 1 | Apply appropriate quantitative tools effectively and use logical modes of thinking to analyze and synthesize information in problem solving situations. | MAT 254 | Fall or Winter | Course Project or  Final Exam |
| 2 | Develop and apply simple mathematical models to real world problems | MAT 254 or PHY 252 | Fall or Winter | Course Project or  Final Exam |
| 3 | Identify, interpret, and formulate hypotheses and communicate the outcomes of experiments. | CEM 141 or PHY 252 | Fall or Winter | Course Project or  Final Exam |