Course SLO of Record*Complete and submit to Division Dean and Office of Instruction*

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| **Course Name and Number**: Math 252 – MULTIVARIABLE CALCULUS III | **Date** October 21, 2013 |
| X Modification of Existing SLOs | ☐New Course  |
| **Lead Faculty approval to write or rewrite** **SLOs:\_\_\_\_\_\_\_\_\_\_\_\_**  |  |

 *Please Initial*

1. **Existing Course SLOs of Record** **to be rewritten (if applicable):**
* Students will demonstrate their ability to determine the area and volume of regions contained in rectangular, cylindrical, and spherical coordinate systems by correctly applying techniques of multiple integration in the calculation process of such quantities.
* Students will demonstrate their ability to evaluate line and surface integrals by applying various techniques such as converting line integrals to definite integrals, applying Green’s Theorem, the Divergence Theorem, and Stoke’s Theorem.
1. **Rationale for writing or rewriting SLOs** *(Note: Changes to SLOs should be substantive. It is recommended that only after several semesters of data collection and a full assessment of the Course should SLOs be changed:.*

The new SLO better is a better representation of course content and will provide easier reporting with new form.

1. **New Course SLOs:**
* Students will demonstrate the ability to identify and draw simple quadratic surfaces.
* Students will demonstrate the ability to apply the concepts of multiple integrals to problems involving area and volume in rectangular, cylindrical, and spherical coordinate systems.
* Students will demonstrate the ability to evaluate integrals, determine the path, apply Green’s Theorem, and evaluate surface integrals, the Divergence and Stokes’ Theorem.
* Students will analyze Green’s Theorem, Stokes’ Theorem, and the Divergence Theorem.

**Course SLOs of Record**

**Course Name and Number**: Math 252 – MULTIVARIABLE CALCULUS III

**Effective Date of SLOs:** FALL 2013 *(Semester and Year)*

**List all currently adopted Course SLOs of Record (include all SLOs for course):**

**Date SLOs adopted by Department:** October 11, 2013 – Mathematics Department SLOberfest*(attach evidence of adoption, meeting minute,; e-mail string)***List of faculty who participated in development of these SLOs:**

Dr. Jeremiah Gilbert, Dr. Stephanie Briggs, Dr. Vicente Alvarez, Dr. Victoria Anemelu, Kristin Dillard, Dr. Zadock Reid, Lori Blecka, Dr. Teri Strong, Ann Gibbons, Yvonne Beebe, Keith Lee, Dr. Abeir Israeil, Moustafa Kanawati, David Smith, and Michael Mayne.

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**Submitted By**