

## Course Outcomes Guide (COG)

**Course Title:** MAT 206 – Differential Equations

**Date:** September 2014

**Course Team:** Jennifer Szczesniak

### Expected Learning Outcomes

**Students will use several methods:**

1. To solve linear differential equations.
2. To solve given types of non-linear differential equations.
3. To use Laplace transformations to solve differential equations.
4. To use differential equations to solve application problems.
5. To classify a given equation and determine a method to use to solve that equation.
6. To work effectively in groups.
7. To use technology, in the form of a computer algebra package, the graphing calculator and other programs, to assist in the problem-solving process.
8. To effectively communicate results and the thought process that led to those results.

**Assessment** (How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)

- There are several common questions that are included on the final exams for each section.

**Validation** (What methods have you used or will you use to validate your assessment?)

- I am not sure how to validate the assessment tools.

**Results** (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

- We have only completed one assessment cycle for this class. Since the course only has about 10 students per year, we were doing a two-year assessment cycle which has just ended this past spring. The data is currently being analyzed.

**Follow-up** (How have you used or how will you use the data to improve student learning?)

**Budget Justification** (What resources are necessary to improve student learning?)

**Course: MAT 206**

**SLOA Data**

**Faculty Team**

	SU 200 9	FA 200 9	SP 201 0	SU 201 0	FA 201 0	SP 201 1	SU 201 1	FA 201 1	SP 201 2	SU 201 2	FA 201 2	SP 201 3	SU 201 3
# Active students	8		11			10			6				
%W	0		0			0			0				
*% walk-away Fs No final exam/grade = F													
% Success (A,B,C)	75		90			100			83.3				
Mean Common Lab Practical Score													
Common Comprehensive Final Exam Score													
Mean course grade	2.5		3.6			3.2			3.5				
Item Analysis <b>Weakest Content Areas</b>													

\*% Walk-away Fs = Did not take the final exam and received a grade of F.

**Content Areas**