

COURSE AND DEPARTMENT LEARNING OUTCOMES

A course learning outcome (CLO) is a concept or topic the student should know after taking this course: After each CLO listed below is the department learning outcome it contributes to.

COURSE LEARNING OUTCOMES:

1. Model exponential growth and decay problems to make numerical calculations,: a, c, d
2. Solve separable differential equations: a
- 3 Standard integration techniques: a, g
- 4 Determine convergence or divergence improper integrals: a, b
5. Determine absolute or conditional convergence or divergence of infinite sums: a, e
6. Represent functions as power series to make numerical calculations: a, b,
7. Graph and calculate areas using polar coordinates: a, b
8. Sketch three-dimensional graphs: b
9. Classify and graph quadric surfaces: a, b

DEPARTMENT LEARNING OUTCOMES

- a; Perform numerical and symbolic computations
- b. Construct and apply symbolic and graphical representations of functions
- c. Model real-life problems mathematically

- d. Use technology to analyze mathematical functions
- e. State and apply mathematical definitions and theorems
- f. Prove fundamental theorems
- g. Construct and present rigorous mathematical arguments

COURSE ASSESMENT TOOLS

1. Term average, based mainly on examinations; 60% of total grade
2. Comprehensive written final examination; 40% of total grade