Mendocino College

COURSE LEVEL STUDENT LEARNING OUTCOMES

Term Effective:	Spring (Semester)	2008 (Year)

Title: Calculus And Analytic Geometry Ii *(limit to 50 characters including spaces)*

Course Number: MTH 211

Initiator: Roger Ahders

Date Submitted: 11/20/2007

Units Min: 5.00

Units Max: 5.00

If this is a variable unit course, then the relationship between units and any difference in expected SLO's should be explained.

Lecture Hours: 5.00 to 5.00

Lab Hours: 0.00 to 0.00

Activity Hours: 0.00 to 0.00

Student Learning Outcomes: *(Enter the SLO's in an outline format. Use the Ctrl + Tab keys to indent for subtopics.)*

- Distinguish functions by type and successfully integrate them with one or more appropriate integration techniques: u-substitution, integration by parts, trigonometric substitution, and partial fractions.
- Use integration in applications including area, volume, arclength, centers of mass, work and hydrostatic force.
- Understand and evaluate improper integrals.
- Graph parametric and polar equations, and use derivatives and and integrals to calculate slopes, arc lengths, and areas.
- Analyze a series by its type and select a suitable test to determine whether it converges or diverges. Know how to estimate the sum of a convergent series using manual and technological techniques.
- Determine power/Taylor series representation of a function and use it to estimate the value of the function within its interval of convergence.

SIGNATURES / APPROVALS:

Instructor(s) _____ Signature _____ Date

Instructor(s) _____ Signature _____ Date