I. College/School – College of Science and Mathematics
   Department of Mathematics and Statistics

II. Course Information

Course Title: Calculus II
Course Abbreviation and Number: MTH 2310
Course Credit Hours: 4
Course Cross Listing(s) Abbreviation and Number: None
Check ("x") all applicable:
General Education Course___
Writing Intensive Course____
Service Learning Course___
Laboratory Course_ x __
Ohio TAG (Transfer Assurance Guide) Course ____x____
Ohio Transfer Module Course______
Others (specify)_______

III. Course Registration

Prerequisites: MTH 2300
Corequisites: none
Restrictions: none
Other: none

IV. Student learning Outcomes

1. Learn the techniques and applications of integration.
2. Learn the concepts, interpretations, techniques, and applications of series and vectors.
3. Learn to communicate mathematics in speech and writing.
4. Improve problem solving skills in both independent and group situations.
5. Gain experience with appropriate use of technology in mathematics.

WSU Core Learning Outcomes
a. Identify the various elements of a mathematical or statistical model
b. Determine the values of specific components of a mathematical/statistical model or relationships among various components
c. Apply a mathematical/statistical model to a real-world problem
d. Interpret and draw conclusions from graphical, tabular, and other numerical or statistical representations of data
e. Summarize and justify analyses of mathematical/statistical models for problems, expressing solutions using an appropriate combination of words, symbols, tables or graphs
V. Suggested Course Materials

Calculus: Concepts and Contexts, Stewart
Calculus II Laboratory Manual, Mercer

VI. Suggested Method of Instruction: Lecture and one laboratory session per week

VII. Suggested Evaluation and Policy: This course will have a final exam. Other evaluations should be a combination of midterm exams, quizzes, and homework.

VIII. Suggested Grading Policy: Exams should count for more than 50% of the course grade. Further details left to the discretion of each instructor.

IX. Suggested Assignments and Course Outline

2.5 weeks Chapter 5: Integrals (sections 5-10)
2.0 weeks Chapter 6: Applications of Integration
1.0 weeks Chapter 7: Differential Equations
4.0 weeks Chapter 8: Infinite Sequences and Series
3.5 weeks Chapter 9: Vectors and the Geometry of Space
1.0 weeks One week reserved for testing spaced throughout the quarter

X. Other Information: None