Course Title/Number	Ordinary Diff Equation MTH 335 Sec 102
Semester/Year	Fall 2017
Days/Time	TR 5:00-6:15pm;
Location	SH 516
Instructor	Dr. Michael Otunuga
Office	WAEC 3229
Office Hours	M-R 10-11am, 4-5pm
Phone	304 696-3049
E-Mail	otunuga@marshall.edu
Text	A First Course in Differential Equations, 3rd Edition by J. David Logan; Springer
Calculator	Graphing calculator is required for the course
Homework	Homework will be assigned in class.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802
	Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment
	See the University Academic Calendar (http://www.marshall.edu/calendar/academic/) for course withdrawal dates.

Course Description

Introduction to Ordinary Differential Equations. Modeling, methods of solution, theory, and numerical approximation. Prerequisites: MTH 231

How each student learning outcome will be practiced and assessed in the course

MTH 335 Student Learning Outcomes	How students will practice each outcome in MTH 335	How student achievement of each outcome will be assessed in MTH 335
Students will employ quantitative as well as a qualitative study of dynamic mathematical equations known as differential equations	Students will attend class, work on homework, participate in class discussions, and ask questions.	Homework, quizzes, project and exams.

Students will demonstrate the ability to work with some fundamental analytical methods for solving particular classes of differential equations (D.E.)	Students will attend class, work on homework, participate in class discussions, and ask questions.	Homework, quizzes, project and exams.
Students will be able to utilize the definition of the solution of a differential equation to determine if a function is a solution of a D.E.	Student will work on homework, participate in class discussions, and ask questions, complete assigned mathematical projects.	Homework, quizzes, project and exams.
Students will be able to analyze real world problems in science, engineering and other field quantitatively.	Students will complete homework, classwork, and quizzes to get Practice on modeling questions.	Homework, quizzes, project and exams.
Student will be able to solve a differential equation using Laplace Transform	Students will work on homework, participate in class discussions, and ask questions to get practice on modeling questions.	Homework, quizzes, project and exams.
Students will be able to use mathematics to create a dynamic equation that can simulate the physical system it is modeling	Students will complete projects, homework and quizzes to get practice and feedback	Homework, quizzes, project and exams.
Students will be able to choose the appropriate method to solve certain models that belong to particular classes of differential equations.	Students will attend class, work on homework, participate in class discussions, and ask questions.	Homework, quizzes, project and exams.

Course Requirements / Due Dates

Attendance: Attendance is compulsory for this class. Coming late to class and leaving class early, playing with cell phone, sleeping in class will be counted as an unexcused absent.
Unexcused absences from **5** classes (equivalent of two-weeks unexcused absence) will result in a reduction of one letter grade for the semester; unexcused absences from **6 or more** classes will result in an F

Homework: Homework will be assigned in class every week from the textbook.

Projects: Projects will be assigned as a take-home/reading materials. Class will be divided into smaller groups. Each group will be asked to present their project/reading materials during class. Students will be expected to collaboratively discuss and clearly explain solutions to the problem assigned to their group.

Tests: There will be 3 in-class tests during the semester and a comprehensive Final Exam. If you know in advance that you will have an excused absence on a test date, please inform me on time and make arrangements to take the test early. Make-up exams will only be given in the event of a university-excused absence.

Final Exam: The final exam will be on. Please make travel arrangements accordingly. Make-up/early tests will not be available to accommodate individual travel plans.

Grading Policy

Attendance:	50pts		
Homework:	100pts	**Scale**	
Exam 1:	100pts	90.00 – 100%	A
Exam 2:	100pts	80.00 – 89.99%	B
Exam 3:	100pts	70.00 – 79.99%	C
Project:	100pts	60.00 – 69.99%	D
Final:	150pts	Below 60.00%	F