

**Marshall University Syllabus  
MTH 140**

<b>Course Title/Number</b>	MTH 140 (CRN:3239) Section 103 <i>Applied Calculus</i>
<b>Semester/Year</b>	Fall 2014
<b>Days/Time</b>	TR 8:00-9:15 AM
<b>Location</b>	Smith Hall 509
<b>Instructor</b>	Dr. Elizabeth Niese
<b>Office</b>	Smith Hall 743C
<b>Phone</b>	(304)696-3609
<b>Email</b>	niese@marshall.edu Please include your name and a subject line MTH 140 in your email.
<b>Office/Hours</b>	<b>MW 1-2:30 PM, TH 9:30-10:30 AM, and BY APPOINTMENT</b> To make an appointment, please email 24 hours in advance when possible.
<b>University Policies</b>	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to <a href="http://www.marshall.edu/academic-affairs">http://www.marshall.edu/academic-affairs</a> and clicking on "Marshall University Policies." Or, you can access the policies directly by going to <a href="http://www.marshall.edu/academic-affairs/?page_id=802">http://www.marshall.edu/academic-affairs/?page_id=802</a> 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

**Course Description:** A brief survey of calculus including both differentiation and integration with applications. 3 hours.

**Required Course Materials:**

- **Textbook:** *Applied Calculus* by Ron Larson
- **Calculator:** For this course you need a basic scientific calculator, the **TI-30XA** (or equivalent). Graphing calculators are not required. You may not use a cell phone, computer, or tablet as a calculator on any exam.

- **Software:** We may use *Mathematica* and *Microsoft Excel* which are available on all University computers.
- **Webwork:** Homework will be assigned through Webwork, a web-based mathematics homework system. If you have difficulty accessing your account, please let me know immediately!
- **Blackboard:** Lecture notes, assignments, review sheets, etc. will be posted regularly on Blackboard. You are responsible for bringing the appropriate materials to class each day.

Course Student Learning Outcomes:	How students will practice each outcome:	How student achievement of each outcome will be assessed
Students will be able to identify and use functions appropriately.	Homework, quizzes, and classwork	Exams
Students will describe the main ideas of Calculus: derivative and integral.	Homework, quizzes, and classwork	Exams
Students will compute derivatives and integrals given a table, graph, or equation.	Homework, quizzes, and classwork	Exams
Students will use derivatives and integrals to solve real world problems and interpret the results.	Homework, quizzes, and classwork	Exams
Students will explain how exponential and logarithmic functions are used in growth and decay models.	Homework, quizzes, and classwork	Exams

### Course Requirements:

- **Homework:** Homework will be assigned on Webwork daily. Late homework assignments are not accepted, except in extenuating circumstances or University-approved absences.
- **Quizzes:** There will be short quizzes most class days. Quizzes will be announced in class the day before. Make-ups will only be given in the event of an excused absence.

- **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 make arrangements to take the test early. Make-up exams are given only in the event of an excused absence. *Tentative* test dates are: September 18, October 16, November 13, **Final Exam:** Thursday December 11, 8:00-10:00 am.

### Grading Policy:

Your final course grade will be calculated as follows:

<b>Homework:</b>	10%	$\geq 90\%$	<b>A</b>
<b>Quizzes:</b>	10%	80% – 89%	<b>B</b>
<b>In-Class Exams:</b>	60% (20% per exam)	70% – 79%	<b>C</b>
<b>Final Exam:</b>	20%	60% – 69%	<b>D</b>
		< 60%	<b>F</b>

### Attendance Policy:

Attendance at all scheduled class times is expected. Make-up tests and quizzes will only be given in the event of an excused absence. If you know in advance that you will be absent, please make arrangements to take the test early if possible. You are responsible for all material missed and should try to get a copy of a classmate's notes.

### Tentative Schedule:

- Week 1: 1.1-1.3
- Week 2: 1.4-1.6
- Week 3: 2.1-2.2
- Week 4: 2.3, Review, Test 1
- Week 5: 2.4-2.5
- Week 6: 2.6, 3.1
- Week 7: 3.2-3.4
- Week 8: 3.4,3.7, Review, Test 2
- Week 9: 4.1-4.2
- Week 10: 4.3-4.4
- Week 11: 4.5-4.6
- Week 12: Logistic growth, Review, Test 3
- Week 13: 6.1, 6.4
- Week 14: Applications, Review