

**MTH 140: Applied Calculus
Fall 2017**

Course Title/Number	MTH 140: Applied Calculus; Section 104; CRN 3162
Semester/Year	Fall 2017
Days/Time	TR 11:00am –12:15pm
Location	Smith Hall 514
Instructor	Dr. Michael Otunuga
Office	WAEK 3229 (Engineering Building)
Phone	304-696 3049
Textbook	Calculus for the Life Sciences 2 nd edition ISBN 13: 9780321964038
Calculator	TI-83 or similar
E-Mail	otunuga@marshall.edu
Free Tutoring	Free Tutoring in Smith Hall 625: M-R 10am-4pm & 5-6:30pm; Friday 10am-12pm
Office/Hours	MW 10-11am and 4-5pm. Others by appointment. To make an appointment, email in advance when possible.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by 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

Course Description: From Catalog

A brief but careful review of the main techniques of Functions and Sequences, Limits, Derivatives, integrals and its Applications

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

MTH 140 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 graph standard algebraic functions.	Students will complete homework, classwork, and quizzes to get practice and feedback.	Homework, quizzes, project and exams.
Students will be proficient at finding limits, derivatives and integrals of functions. Students will understand the concept of functions and their applications.	Students will complete homework, classwork, and quizzes to get Practice and feedback.	Homework, quizzes, project and exams.
Students will be able to develop mathematical model to solve real	Student will complete assigned mathematical projects.	Homework, quizzes, project and exams.

world problem, select a function to model a physical example and apply calculus techniques to make Predictions		
Students will be able to analyze real world problems in sciences, interpret symbolic and numerical result and recognize when a result is invalid in the real world.	Students will complete homework, classwork, and quizzes to get Practice on modeling questions.	Homework, quizzes, project and exams.

Course Requirement

Attendance: Attendance is required. ***Unexcused absences for more than two weeks (5 classes) will result in a reduction of one letter grade for the semester; unexcused absences from six or more classes will result in a F grade.*** You will not be allowed to take makeup quizzes or exams, homework, etc. unless you have a university excuse. If an excused absence results in missing quiz/exam/HW, then a make-up date (*within one week of absence*) must be scheduled with course instructor. **Coming late to class, sleeping in class, and use of cell phone** will be counted as an unexcused absence. Consult your handbook regarding university excused absences.

Homework: Homework will be assigned on WebWork or given from the textbook weekly. Late homework assignments are not accepted, except in extenuating circumstances or University-approved absences.

Quizzes: There will be a brief quiz during class meetings (time will be announced in class). Make-up quizzes are only given in the event of a university-excused absence.

Projects: Projects will be given to students. Students are to work in group and present their work as a presentation during dead week. You either have the chance to come up with your own project in your discipline (with applications in Applied Calculus) or one will be given to you.

For sample of past project questions, visit my website at <http://science.marshall.edu/otunuga/> and click project for MTH 229.

Tests: There will be 3 in-class tests during the semester, 1 project and a comprehensive Final Exam. **For past exam questions, visit my website at <http://science.marshall.edu/otunuga/> and click old 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 will only be given in the event of a university-excused absence.

Final Exam: The final exam will be on **Thursday, Dec 14, 2017** from **10:15am-12:15pm**. Please make travel arrangements accordingly. Make-up/early tests will not be available to accommodate individual travel plans.

Grading Policy

Attendance	25pts
Quizzes	75pts
Homework	50pts
Three major exams	300pts
Project	100pts
Final (comprehensive) exam	150pts
The grading scale is rigid.	
90.00 – 100	A
80.00 – 89.99	B
70.00 – 79.99	C
60.00 – 69.99	D
Below 60.00	F

TENTATIVE COURSE SCHEDULE (may change according to class pace)

<u>Week (Mon - Fri)</u>	<u>Topic Covered</u>	<u>Activities</u>
Week 1 (8/21-8/25)	1.1, 1.3	
Week 2 (8/28-9/1)	1.4- 2.2	
Week 3 (9/4-9/8)	2.3-2.4	
Week 4 (9/11-9/15)	Test 1, 3.1	Test 1
Week 5 (9/18-9/22)	3.1-3.4	
Week 6 (9/25-9/29)	4.1-4.4	
Week 7 (10/2-10/6)	4.5-4.6	
Week 8 (10/9-10/13)	Test 2, 5.1	Test 2
Week 9 (10/16-10/20)	5.1-5.3	
Week 10 (10/23-10/27)	5.4-6.3	
Week 11 (10/30-11/3)	6.4-6.5	
Week 12 (11/6-11/10)	Test 3	Test 3
Week 13 (11/13-11/17)	7.1-7.3	Project Assigned
Week 14 (11/20-11/24)	Thanksgiving break;	
Week 15 (11/27-12/1)	7.4-7.5	
Week 16 (12/4-12/8)	Project Presentation: Dead Week	Final Exam: Thursday 12/14, 10:15am-12:15pm