

# Marshall University

# MTH 140

# Syllabus

<b>Course Title/Number</b>	Applied Calculus MTH 140 - Section 202 - CRN 3941 - Credits 3
<b>Semester/Year</b>	Spring 2018
<b>Days/Time</b>	<b>MWF</b> 12:00 pm - 12:50 pm
<b>Location</b>	Smith Hall 516

<b>Instructor</b>	Dr. JiYoon Jung
<b>Office</b>	Smith Hall 742D
<b>Phone</b>	(304) 696-3285
<b>E-Mail</b>	<a href="mailto:jungj@marshall.edu">jungj@marshall.edu</a>
<b>Office Hours</b>	<b>MWF</b> 01:00 pm - 02:50 pm or by appointment  I am always happy to answer questions or talk about the course material any time. To make an appointment, email in advance when possible or stop by my office, Smith Hall 742D.

<b>Tutoring Services</b>	<p>In addition to office hours, there are two free tutoring options for students in Math 160.</p> <p>The math tutoring lab will be open this semester in Smith Hall 625 during the following hours: <b>MTWR</b> 10:00 am - 4:00 pm and <b>MTWR</b> 5:00 pm - 6:30 pm and <b>F</b> 10:00 am - 12:00 pm. <a href="http://www.marshall.edu/math/tutoring">http://www.marshall.edu/math/tutoring</a></p> <p>The University College offers appointment-based tutoring in in the Communications Building. Please consult their web page for additional information. <a href="http://www.marshall.edu/uc/tutoring-services/">http://www.marshall.edu/uc/tutoring-services/</a></p>
<b>University Policies</b>	<p>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">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/policies/">www.marshall.edu/academic-affairs/policies/</a>.</p> <p>Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Dismissal/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment</p>

### Course Description: From Catalog

A brief survey of calculus including both differentiation and integration with applications. Not to be substituted for Mathematics 131 or Mathematics 190.

PR: ACT Math 24, SAT Math 580 (560 Before Mar. 16), Placement Math 104 After SP17, MTH127 Minimum Grade C, MTH130E Minimum Grade C, MTH130 Minimum Grade C, MTH130H Minimum Grade C, or MTH132 Minimum Grade C.

### Required Texts, Additional Reading, and Other Materials

- Textbook: Greenwell, Ritchey, and Lial. 2015. Calculus for the Life Sciences, 2nd edition. Pearson. (ISBN 13: 9780321964038). A copy of the textbook is available for short-term borrowing at the front desk of Drinko Library.

- You should bring your calculator, paper, and a pen or pencil to every class meeting.
- Students are required to have a scientific or graphing calculator during the course.
- Students will be required to use Excel and Word. Microsoft Mathematics is optional.
- You must have internet access at your residence. Check your official MU email account daily.

**MU Online:** It is important to visit MU Online regularly for up-to-date information about the course. It hosts all the course materials including announcements, handouts, assignments, and reading materials. Although I will make my best effort to announce everything in class, it is your responsibility to keep up to date with assignments on MU Online.

### Attendance Policy

Students are expected to attend each class. **Every three unexcused absences will be subject to a full letter downgrade until a student reaches an "F"**. There will be no credit for the daily quiz you missed unless you have an excused absence. To obtain an excused absence, please go to the Dean of Students' Office in the MSC. **Students must notify the instructor by phone or e-mail prior to an exam if they cannot take a scheduled exam.** Students must present a serious reason for missing any exam. Makeup exams will be given to students outside of class time at the convenience of the instructor.

### Course policies

Cheating or plagiarism is a serious offense and will not be tolerated. It will be thoroughly investigated, and might lead to failure in the course or even to expulsion from the university. **If you are late to class**, if you leave class early, if you are disruptive, if you are sleeping, reading the newspaper, working on other homework, **surfing the internet** or for any other reason are not actively engaged in activities related to math class, **you will not receive credit for participating in class that day.** I expect that you will not only attend class, but that you will participate in class. If you do not respect yourself, other students, or the instructor during class, you may be asked to leave class.

**Objectives of Course: The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.**

<b>Course student learning outcomes</b>	<b>How students will practice each outcome in this course</b>	<b>How student achievement of each outcome will be assessed in this course</b>
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 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 and exams.
Students will be able to develop mathematical model to solve real world problem, select a function to model a physical example and apply calculus techniques to make Predictions	Students will complete homework, classwork, and quizzes to get practice and feedback.	Homework, quizzes and exams.
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 and exams.

**Course Schedule/Course Requirements/Due Dates**

<b>January 8 – January 26</b> Section 1.1, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3
<b>January 29 – February 16</b> Section 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2
<b>February 19 – March 9</b> Section 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3
<b>March 12 – April 6</b> Section 5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 7.1
<b>April 9 – April 27</b> Section 7.2, 7.3, 7.4, 7.5, and Exam 1, 2, 3, 4
<b>Exam 1</b> on Monday (January 29) 12:00 pm – 12:50 pm
<b>Exam 2</b> on Monday (February 19) 12:00 pm – 12:50 pm
<b>Exam 3</b> on Monday (March 12) 12:00 pm – 12:50 pm
<b>Exam 4</b> on Monday (April 9) 12:00 pm – 12:50 pm
<b>Final</b> on Friday (May 4) 10:15 am – 12:15 pm

## Grading Policy

You will be able to obtain a maximum of 500 points in this class, divided as follows:

- **Exams (400 points):** There will be four in-class exams and one final exam (80 each). These exams will focus on the topics discussed in class and in the homework. **Homework will be assigned on MU Online after each lecture session.** You can bring questions about homework problems to class, office hours, or the tutoring lab. **The Final exam will be comprehensive.**

- **Participation Quizzes (100 points):** There will be five participation quizzes (20 each). These daily quizzes will focus on the topics discussed in class. You will be graded on a credit / no-credit basis, with credit for completing the quiz with a reasonable effort.

- The **total number of points you earn** will be divided by the **total number of points possible** to determine your final percentage. At the end of the semester, your overall letter grade will be assigned on the following scale:

A: 90 – 100%

B: 80 – 89%

C: 70 – 79%

D: 60 – 69%

F: Below 60%