George Mason University
MATH-123 – Calculus I (3 credits)
Fall 2019

Instructor:	**Joanna Jauchen**
Email:	**jjauchen@gmu.edu** Email is the best way to reach me after you have exhausted these options: 1. Read the syllabus. 2. Look at the announcements on Blackboard. 3. Listen carefully when I'm making announcements in class. This means you have to be on time. 4. If you miss class, ask another student what you missed. This is not a reason for emailing me. All math questions should be asked in person after class, during office hours or with Learning assistants.
Instructor Policies:	1. Work should be done in pencil. 2. Only MyMathLab work is accepted late. 3. No food/drink in class. 4. No computers or cell phones are allowed to be used during class. Please turn your phone off/silent and put it away upon entering class.
Office Address:	Exploratory Hall, room 4403
Office Hours & Location:	TBA Also by appointment
Class Meeting Time and Location:	Horizon 3008 T 1:30 pm – 4:10 pm
Required Materials:	1. Book + Access Code for MyMathLab for Thomas Calculus, 14th edition (included with the purchase of a new book) OR Access Code only (includes ebook) (http://www.mymathlab.com). If you had MML access before, you do not need to purchase this again. 2. We do not use calculators in this class. I suggest you do not use them on your homework.
Course Description:	This is the first part of a two-semester sequence that covers algebra through basic calculus covered in Math 113. Math 123 will review basic precalculus and then proceed to cover limits and derivatives. The course requires a serious time commitment, both in attendance and outside time for homework and studying.

| **Attendance:** | I know this semester is going to be a little chaotic with absences. If you are well, please do try to come to class. If you are sick, please stay home. Please be filling out the Mason Covid screening every day. |

For folks who are sick, I will stream the class so you can login and participate. Most of the time, these absences will not require extensions on homework.

I understand that sometimes people are sick or have conflicts with class. A reasonable number of absences should not adversely affect your grade. I do not track excused or unexcused absences in this course.

School Closure

In case of school closure, late start, or canceled class, you will have video lecture from me and assignments, so check your email. I try to keep this class on schedule as best I can.

Homework:

Working homework is the most important part of the learning process in this course. Please be sure you have allocated enough time for this course.

Homework is assigned in MyMathLab and by hand.

MyMathLab:

MyMathLab is an online software system that accompanies your textbook. MyMathLab quiz will be due at 11:59 on due dates. See MyMathLab for dates for specific assignments.

To sign up:
1. Login to our blackboard course at mymason.gmu.edu
2. Click on "MyMathLab" on the left.
3. If you have a Pearson account, then login. Otherwise, sign up for a new account.
4. Select an option
    a. Use an access code (if you bought a new book, you got one of these).
    b. Buy access online with a credit card
    c. Get 17 days of temporary access (look for the tiny blue link at the bottom of the page)

MyMathLab Technical Support: http://247pearsoned.custhelp.com (available 24 hours a day)
Pearson Customer Service and Technical Support: 800-677-6337.

MML is a computer graded system. If you get problems right, they are marked correct. There is no partial credit on individual questions. The computer system, like most technical systems is picky about inputs, so please check your answers before submitting your work.

MyMathLab is accepted two days late for a 20% penalty.

In-Class /Quizzes/ Preparation:

You need to prepare for every class. This includes reading the material that we will be covering in lecture, taking notes over your reading and working the examples, and doing any other problems I assign. You will turn something in to me almost every day before or during class. Sometimes these are pop-quizzes given randomly in class throughout the semester. I also give "quizzes" that are things like checking if you did the preparation work, asking you to work with other people etc. No make-up quizzes are given. Two quiz grades are dropped to account for late-adding the course, illness, car trouble, or any other excused or unexcused absences.

Anything due on Gradescope is due by 1 pm on Tuesday. No late work is accepted. I do not accept *anything* via email.

Tests & Final Exam:	There are 2 exams in this course, and one comprehensive final exam. There are no make-up exams unless you have a documented excused absence (that is an absence that I consider excused, like being in the hospital). Decisions about excused absences are solely at the discretion of the instructor.

Exam dates are provided on the last page in the schedule. I reserve the right to change exam dates as the semester progresses. The final exam date is given in the schedule on the last page of the syllabus. There are no make-ups for the Final Exam without documented excused absence.

All exams are given to uphold strict academic integrity standards. The following policies are in place for each exam.

1. No collaboration is allowed on the exams. Any indication that you have worked together, used someone else's ideas, copied, or allowed a fellow student to copy your work is a violation of the GMU Honor Code. The exam should be your work and your work only.
2. No calculator is allowed on exams except where noted. No other books, notes, cell phones, computers or aids may be used. Having access to any unauthorized materials, calculators or devices while you are in possession of the exam is a violation of the academic honesty code.
3. Seats are assigned during each exam. Once you receive the exam, you are not allowed to leave the exam room until you are ready to turn the exam in.

Requirements and Grading:

Your grade is the maximum of two grading schemes (shown below):

Grading Scheme 1:

MML	20%
Handwritten work	20%
Exam 1	20%
Exam 2	20%
Final Exam	20%

Grading Scheme 2:

MML	20%
Handwritten work	20%
Exam 1	10%
Exam 2	25%
Final Exam	25%

Scale:

100-90	A
89-80	B
79-70	C
69-60	D
59-0	F
+/-	Added at Instructor discretion

Withdraw & Audit   See the GMU website for important add/drop deadlines: http://registrar.gmu.edu/calendars/

Tutoring: The Math Tutoring Center is located in the Johnson Center Room 344. Help is available on a walk-in basis. For hours of operation see *http://math.gmu.edu/tutorcenter.htm*

The Volgenau School of Engineering also offers peer tutors.
http://volgenau.gmu.edu/undergraduates/peer-mentors

MyMathLab is also a resource available for this class. In MML there are lecture videos, and step - by-step instructions on how to complete homework problems.

Academic dishonesty and the GMU Honor Code:

You are expected to follow the GMU Honor Code *http://academicintegrity.gmu.edu/honorcode/*

No collaboration is allowed on quizzes or tests. Any indication that you have worked together, used someone else's ideas, copied, or allowed fellow student to copy your work is a violation of the GMU Honor Code.

Some of the behaviors that will be considered cheating are:
- Communicating with another person during an assessment
- Copying material from another person from any assignment being graded
- Allowing another person to copy from any assignment being graded
- Use of unauthorized assistance on any assignment being graded
- Use of unauthorized notes or books during an assessment
- Providing or receiving a copy of a quiz or exam used in the course
- Use of a cell phone during an assessment

Learning Differences & Special Needs

If you have a learning or physical difference that may affect your academic work, please see me and contact the Office of Disability Services (ODS) at 993-2474, http://ods.gmu.edu . All academic accommodations must be arranged through the ODS.

MATH-123 - Calculus (3 credits)   Course dates are tentative and subject to change.
MML is due on Saturday at 11:59 pm
Written work (Gradescope) due Tuesdays by 1 pm

Week	Class	Topic
1	1/25	Class Introduction/Syllabus/Grade Policy Discussion Review and 1.1
		1.1 – Functions and their Graphs (no piecewise functions) Unit Circle
2	2/1	1.2 – Combining Functions – Shifting and Scaling Graphs
		1.2 – Trig Functions – Graphs Out of class – exponent rules
3	2/8	1.3 – Solving Trig Equations
		1.5/1.6 - Exponential and Log Functions (need way way way more on solving log and exp equations)

4	2/15	1.6 – Inverse Functions
		  Log functions
		  Arctrig functions

		Review (if time)
	2/22	**Exam 1**
5	3/1	2.2 – Limit of a Function (intuitive definition)
		2.2/2.4 – One sided and two sided limits Piecewise Functions

6	3/8	2.2 – Limit laws
		  Limits based on operators
		  Limits based on function classification

		2.5 – Continuity Limits based on continuity
		Spring Break
7	3/22	2.6 – Discontinuities; VA and holes Mostly trig stuff here
		2.6 – An extension - Limits at infinity (End Behavior) Power functions
8	3/29	3.1 – Tangent Lines and the Derivative at a point (with 2.1)
		3.2 – The Derivative as a Function
8	**4/5**	**Exam 2**
10	4/12	3.3 – Differentiation Rules (Basics – power rule, sum/difference, constant multiplier)
		3.3 – Differentiation Rules (product/quotient) Derivatives of Log Functions
11	4/19	3.4 – The Derivative as a Rate of Change
		3.6 – The Chain Rule (decompositions)
12	4/26	3.5 – Derivatives of Trig Functions
		3.6 – The Chain Rule (really hard problems)
13	5/3	3.7 – Implicit Differentiation
		Review

	5/17	Final Exam at 1:30 – 4:15 pm in our normal classroom No early finals. No late finals. Be there.