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. I do not accept late work. 3. 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:	W 11:15 am – 1:15 pm in Exploratory 4403 F 1:30 – 2:30 pm in Exploratory 4403 Also by appointment
Class Meeting Time and Location:	Robinson B106 W 1:30 pm – 4:10 pm
Required Materials:	1. *Thomas' Calculus: Early Transcendentals*, 14th edition, by Hass, Heil Weir. If you already have a book, or had mml access previously, you do not need to buy another one. 2. Access Code for MyMathLab (included with the purchase of a new book) Code with ebook included (http://www.mymathlab.com). If you had MML access before, you do not need to purchase this again. 3. 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. a.

Attendance:

The best chance of passing this course comes from 1) attending class, and 2) doing the work.

If you miss class, you miss the opportunity for help on the material presented, discussed and worked on that day in class. Regardless of whether you are present or absent from class, **you** are responsible for everything that happens in class (assignments, homework, quizzes, etc).

I take attendance every class. You get one attendance grade per week, counted In-Class quiz grades. The grading is done on an all-or-nothing scale as follows:

- Present for all classtime for two classes – 10 points
- Absent for part or all of either class – 0 points

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 every night at 11:59 before we have class (so on Mondays and Wednesdays. 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 every day in 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.

Tests & Final Exam:

There are 3 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.

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:

MML	10%
Handwritten work	20%
Exam 1	10%
Exam 2	20%
Exam 3	20%
Final Exam	20%

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.

Week	Class	Topic
1	8/28	Class Introduction/Syllabus/Grade Policy Discussion Review and 1.1
		1.1 – Functions and their Graphs (no piecewise functions) Unit Circle
2	9/4	1.2 – Combining Functions – Shifting and Scaling Graphs
		1.2 – Trig Functions – Graphs Out of class – exponent rules
3	9/11	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	9/18	1.6 – Inverse Functions Log functions Arctrig functions
		Review
	9/22	**Exam 1: Exams will be taken out of class on Sunday. Times to be posted as soon as I know them.**
5	9/25	More on arctrig functions (graphs)
		2.2 – Limit of a Function (intuitive definition)
6	10/2	2.2 – One sided and two sided limits Piecewise Functions
		2.3 – Precise definition of a limit
7	10/9	2.2 – Limit laws Limits based on operators Limits based on function classification
		2.5 – Continuity Limits based on continuity
8	10/16	2.6 – Discontinuities; VA and holes Mostly trig stuff here
		2.6 – An extension - Limits at infinity (End Behavior) Power functions
	10/20	**Exam 2: Exams will be taken out of class on Sunday. Times to be posted as soon as I know them**
9	10/23	3.1 – Tangent Lines and the Derivative at a point (with 2.1)
		3.2 – The Derivative as a Function
10	10/30	3.3 – Differentiation Rules (Basics – power rule, sum/difference, constant multiplier)
		3.3 – Differentiation Rules (product/quotient) Derivatives of Log Functions
11	11/6	3.4 – The Derivative as a Rate of Change
		3.6 – The Chain Rule (decompositions)
12	11/13	3.5 – Derivatives of Trig Functions
		3.6 – The Chain Rule (really hard problems)
13	11/20	3.7 – Implicit Differentiation
		Review
	11/24	**Exam 3: Exams will be taken out of class on Sunday. Times to be posted as soon as I know them**
14	11/27	Thanksgiving Break – no class

15	12/4	3.8 – Derivatives of Inverse Functions and Logs
		Review
16	12/12	Final Exam at 1:30 – 4:15 pm in our normal classroom No early finals. No late finals. Be there.