

MONTGOMERY COLLEGE
DEPARTMENT OF MATHEMATICS
ROCKVILLE CAMPUS
Calculus One MA181; CRN 22301
Fall 2019

Professor: Dr. Fred Katiraie (fred.katiraie@montgomerycollege.edu)
Classroom: Science West Room 203
Class Hours: Monday and Wednesday 4:00 PM to 6:15 PM
Office Hours: Monday and Wednesday 12:30 to 1:00 PM, Thursdays 5:30 to 6:30 PM,

Office: Science Center Room 354P
Phone: (240) 567-8060

Optional Review Sessions for Calculus I Students: Tuesdays 4:00—6:00 PM in Ackerman Learning Center
Science West Room 103

Website: <http://web4students.montgomerycollege.edu/facultyFTPSites/fkatira1/>

Math Club Tutoring Hours in Science Center Room 362: Fridays 3:00 to 5:00 PM.

Text: *Calculus Concepts and Contexts 4th* Edition, by James Stewart. Brooks / Cole Thomson Learning, Pacific Grove, CA.
ISBN 0-495-55972-5

WebAssign online access code **(REQUIRED)**.

You may purchase the physical textbook or not.

or you may elect to purchase the WebAssign access code only. Your WebAssign access will include a *Calculus Concepts and Contexts 4th* Edition text e-book.

Required Computer Access: Most (if not, all) of your homework is to be done on the computer with WebAssign. A package including both the printed physical textbook and the online access is available at the campus bookstore *Calculus Concepts and Contexts 4th* Edition text e-book.

If you would like to purchase your webassign access code only, then go

<https://myhome.cengagebrain.com/cb/register.htm?method=loadRegistrationForm>

Once you are logged in the WebAssign, then you can view the ebook.

IT IS UP TO YOU whether you purchase the physical textbook along with WebAssign and the e-book, or WebAssign along with the e-book but without the physical textbook.

Access to the online materials is available at <http://webassign.net/>

You will need the following **WebAssign class key** to enroll in this section of WebAssign online homework.

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Follow the instructions in the Student Self-Enrollment Guide found at the end of this syllabus. (There is also an enrollment PowerPoint on my [website](#) .)

In addition to reading announcements and completing daily assignments through WebAssign, you are expected to check your email regularly and frequently, although I will use student email only for situations where timing is essential. Most information is discussed in class and all written work will be turned in either as hard copy during regular class times or through WebAssign.

Homework due dates are easily available on WebAssign. If you contact me through email, you must use your **student email account** (rather than a gmail or other personal account).

Course Description: MA 181 is an introduction to the major ideas of single variable calculus. The topics include limits, derivatives, integrals and applications of algebraic and transcendental functions. The text uses a four-fold approach (analytic, graphical, numerical, and verbal) to problem solving.

Prerequisite: A grade of C or better in MATH165 or appropriate score on the placement test.

Calculator: You will be allowed to use calculators, particularly with decimals, percents, and problem solving. This will enable you to concentrate on the process and not get bogged down in the calculations. I would suggest that you purchase a **graphing calculator**. You will be able to use the graphing calculators in your upcoming Mathematics courses. In general, calculators **TI-83**, **TI-83 Plus**, or **TI-84 Plus** are preferred; however, TI 85 or TI 86 are also acceptable. TI calculators may be borrowed from the math / science center on a daily basis. Calculators are permitted on the Competency Exam for most of the problems.

No one will be allowed to share a calculator during quizzes and exams. (TI 89 or Higher Will Not Be Allowed On Exams/Quizzes)

Attendance: You are expected to attend every class and attendance will be considered in your performance in the class. If you miss a class you are responsible for getting the notes and assignments in on time. ***Expect you to arrive to class on time.***

Please be aware that you may be dropped if you accumulate absences whose sum is equivalent to more than one week worth of classes. As a result a student may be dropped after the college official deadline date for "withdrawals with a W".

Homework Binder: There are some bad work habits which may hinder one's performance in a course such as this one. As an example, sloppy handwriting often causes careless mistakes that lead to unnecessary confusion and lack of confidence in one's work. In order to ensure that your work for this course is organized, you will be required to have a 3-ring binder (or a folder of your choice) which contains separate sections for:

- Homework assignments
- Quizzes, tests and handouts (such as syllabus)
- Class notes (unless you prefer to keep these in a separate notebook).

The homework assignments should be written neatly and should include only the relevant calculations, not messy scratch work. You should also include the statement of each problem. (For word problems, you can briefly summarize the statement using symbols, if necessary) Keep the various components of the binder file in separate sections (Do not mix your quizzes in with your homework) I will periodically look at your binder and may grade selected problems. (I especially will be interested in seeing your binder when you are not performing well on quizzes and tests.)

Grading Policy: There will be 8 quizzes, and the lowest 3 quiz grades could be dropped. We will also have 5 exams, and the lowest exam will be dropped. You obtain a zero for every exam that you miss, and **NO MAKE UPS** will be given.

Your final grade will be based on the following:

Homework	60
Quizzes	100
Exam I	140
Exam II	140
Exam III	140
Exam IV	140
Exam V	140
Final Exam	280
Excellent Homework Binder	Drops One Lowest Quiz
Excellent Attendance & Participation	Drops One Lowest Quiz
Excellent Attendance in Math Science Center / Review Sessions	Drops One Lowest Quiz

Grading Scale

900 – 1000 = A

800 – 899 = B

700 - 799 = C

600 – 699 = D

599 and Below = F

The following applies to students who miss at most 2 classes in the entire semester

If you do better on the final exam than one of your unit test, this lowest test grade will be replaced by your final exam percentage.

There will be no make-ups on homework assignments to be turned in, or quizzes.

No make-up exam will be allowed.

Please be advised that on the day of exam/quiz:

I will not provide calculators/pencils.

You will not be permitted to leave the room.

You may not use or even hold a cell phone.

You will not be allowed to share calculators

Dropping: Check your specific drop deadlines online. Go to My MC, Quick Links, Register for Classes, View Drop Deadline Dates.

Final Exam: The final examination for our class will be on
Monday December 16th 5:00 PM to 7:00 PM
Failure to take the final will result in an F for the course.

Ackerman Learning Center (formerly known as Math Science Center)

Math/Science Tutoring Lab: There is a tutoring lab in room 109 of Science Center West.

This service is **FREE** to Montgomery College students.

Please **DO NOT WAIT TO THE LAST MINUTE!**

Go to the lab on a regular basis – get to know the facilities and the tutors. The lab phone number is (301)279-5200.

<http://cms.montgomerycollege.edu/edu/department2.aspx?id=27408>

MSC Fall hours of operation are:

Monday - Thursday	8:00 a.m.	-	8:00 p.m.
Friday	8:00 a.m.	-	4:00 p.m.
Saturday	10:00 a.m.	-	3:00 p.m.
Sunday	Closed		

Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hour. A letter from Disability Support Services (R-CB122; G-SA175; or TP-ST120) authorizing your accommodations will be needed. Any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations for individuals with disabilities are found at: www.montgomerycollege.edu/dss/tbl-cnt.htm.

Academic Honesty: Common examples of academic dishonesty and misconduct can be found below and in the Student Code of Conduct, Section IV. If you are in doubt about what constitutes academic dishonesty, consult your professor or the Student Code of Conduct. Examples of academic dishonesty include, but are not limited to using “cheat notes” during an exam, copying answers from another student, allowing another person to copy your work, either inside or outside of class; using work from previous semesters; and copying from a book, magazine, Internet site, or brochure when writing a paper without giving credit to the source. Faculty members may impose grade sanctions for violations of academic ethics, normally ranging from a minimum of F on the assignment in which the dishonesty occurred to a maximum of an F in the course. Faculty members may choose to impose different sanctions. Faculty members also have the prerogative of referring a case to the campus Dean of Student Development with a specific request that the dean consider imposing sanctions. Source: College wide Policies and Procedures Manual: Student Code of Conduct: Academic Dishonesty and Misconduct (Section IV). [http://www.montgomerycollege.edu/departments/academicevp/Student_PandP.htm]

Tentative Schedule
Quiz Dates are marked asterisk (*)

NO	DATE	SEC.	HOMEWORK ASSIGNMENTS	<u>Topics</u>
1	September 4th	1.1 1.2 1.3 1.4	Please complete your HW in WebAssign	Four Ways to Represent a Function Mathematical Models New Functions and Old Functions Graphing Calculators
2	September 9 th	1.5 1.6 1.7	Please complete your HW in WebAssign	Exponential Functions Inverse Functions and Log Parametric Curves
3*	September 11th Quiz 1	2.1 2.2 Quiz 1	Please complete your HW in WebAssign Quiz 1	The Tangent and Velocity Problems The Limit of a Function
4*	September 16th	T1	Test One	Test One Covers Chapter One
5	September 18 th	2.3 2.4	Please complete your HW in WebAssign	Calculating Limits Using the Limit Laws, Continuity
6*	September 23rd	2.5 2.6 Q2	Please complete your HW in WebAssign Quiz Two	Limits Involving Infinity Tangents, Velocities, and Other Rates of Change
7	September 25 th	2.7 2.8	Please complete your HW in WebAssign	Derivatives, The Derivative as a Function What does the Derivative of Function F(x) Say?
8*	September 30th	Q3 REV	Quiz Three Review for Test Two	
9*	October 2nd	T2	Test Two	Test Two Covers Chapter Two and 50 points from test one
10	October 7 th	3.1 3.2	Please complete your HW in WebAssign	Derivatives of Polynomials and Exponential Functions The Product and Quotient Rules
11	October 9th	3.3 3.4 Q4	Please complete your HW in WebAssign Quiz Four	Derivatives of Trig. Functions The Chain Rule
14	October 14 th	3.5 3.6	Please complete your HW in WebAssign	Implicit differentiation Derivative of Inverse Trig. Functions
15*	October 16th	3.7 3.8 Q5	Please complete your HW in WebAssign Quiz Five	Derivatives of Logarithmic Functions Rate of Change in the Natural and Social Sciences
16	October 21 st	3.9 REV	Please complete your HW in WebAssign Review for Test Three	Linear Approximations and Differentials

17*	October 23 rd	T3 4.1 REV	Test Three	Test Three Covers Chapter Three and 50 points from test two
18	October 28 th	4.1 4.2	Please complete your HW in WebAssign	Related Rates Maximum and Minimum Values
19*	October 30 th	4.3 Q6	Please complete your HW in WebAssign Quiz Six	Derivatives and the Shapes of Curves
20	November 4 th	4.4 4.6	Please complete your HW in WebAssign	Graphing with Calculus and Calculators Optimization Problems
21*	November 6 th	4.7 Q7	Please complete your HW in WebAssign Quiz Seven	Newton's Method
22	November 11 th	4.8	Please complete your HW in WebAssign Review for Test Four	Antiderivatives
23*	November 13 th	T4	Test Four	Test Four Covers Chapter Four and 50 points from test three
24	November 18 th	5.1 5.2	Please complete your HW in WebAssign	Areas and Distances The Definite Integral
25*	November 20 th	5.3 Q7	Please complete your HW in WebAssign Quiz Seven	Evaluating Definite Integrals
26*	November 25 th	5.4 Q8	Please complete your HW in WebAssign Quiz Eight	The Fundamental Theorem of Calculus
☺ ☺	November 27 th – 30 th		<i>Thanksgiving Break No Classes</i>	☺☺☺☺☺☺☺☺ ☺☺
27	December 2 nd	REV	Review for Test Five	
28*	December 4 th	T5	Test Five	Test Five Covers Chapter Five and 50 points from test four
29	December 9 th	REV	Review for Final	
30	December 11 th	REV	Review for Final	

Final Exam:

The final examination for our class will be on

Monday December 16th 5:00 PM to 7:00 PM

Failure to take the final will result in an F for the course.

THE INSTRUCTOR RESERVES THE RIGHT TO AMEND THIS SYLLABUS AS APPROPRIATE THROUGHOUT THE SEMESTER. STUDENTS WILL BE NOTIFIED OF ANY SUCH CHANGES.