

**MONTGOMERY COLLEGE - Germantown Campus****Mathematics & Statistics Department****Course Syllabus****I. Instructor Information**

Professor: Zhou Dong

Email: Zhou.Dong@MontgomeryCollege.edu

Phone: (240) 567-7810

Office: HT 134

Mail box: HT 314

Office Hours:

Monday	Wednesday	Friday
10:00 am – 11:50 am	10:00 am – 11:50 am	10:00 am – 11:50 am

You may also schedule an appointment outside of these times.

Learning Assistant: Robert Huarcaya

Email: rhuarcay@montgomerycollege.edu

Office Hours: Tuesday 12:10 – 1:00 pm (in HT403)

**II. General Course Information**

Calculus II – MATH182 (Formerly MA182)

4 credits / 5 hours (For computation of tuition, this course is equivalent to five semester hours. Five hours each week.)

A continuation of MATH 181; intended primarily for students of the physical sciences, engineering, and mathematics. Further differentiation and integration of transcendental functions. Methods of integration with applications, indeterminate forms, improper integrals, Taylor's formula; infinite series; polar coordinates.

MATH182 fulfills a General Education Program Mathematics Foundation requirement.

**PREREQUISITE:**

A grade of C or better in MATH 181 or equivalent, or consent of department.

Fall 2019: CRN 22026

Class Times: TR 10:00 am – 12:10 pm

Class Room: HT 403

**III. Specific Outcomes**

See attached MATH182 Course Outcomes

## IV. Text and Supplies

*Single Variable Calculus: Concepts and Contexts* (4th edition), by James Stewart, Brooks-Cole, 2007. (The ebook is available with WebAssign).

*WebAssign Access Code*

Class Key to enroll on WebAssign: **montgomerycollege 7084 9373**

A *graphing calculator* is required for this course. A TI-83 or TI-83 Plus is recommended. Calculators may be borrowed from the MAPEL Center for the semester.

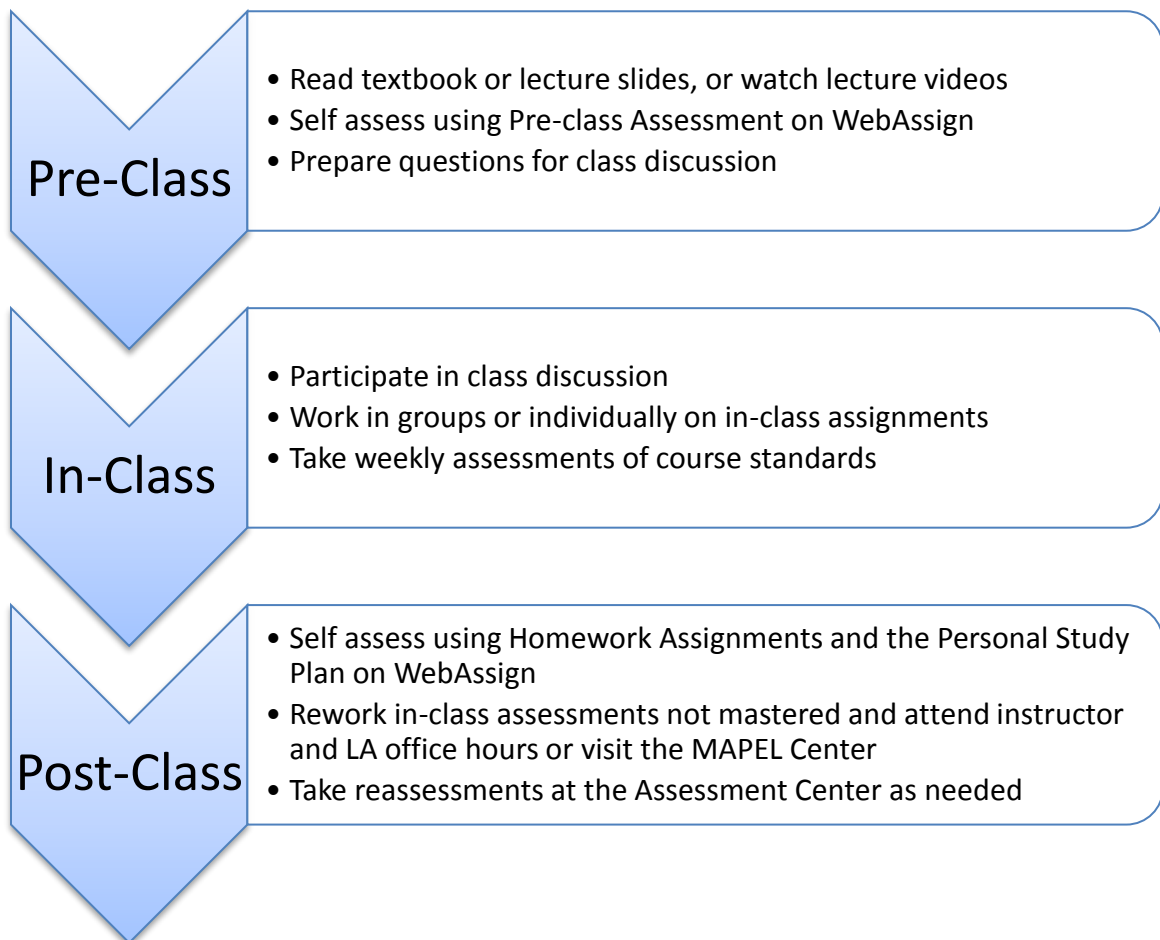
Each student is required to join the course “Remind” group in order to receive announcements about the class. Link to join our class group:

<https://www.remind.com/join/mccalc2>

## V. Course Requirements

### A. Flipped Classroom Instruction

This course utilizes Flipped Classroom Instruction:



## B. Course Grade

This course uses Standards Based Grading. Your course grade will be based solely on mastery of the course standards (see attached list of standards). Each standard is either “Core” or “Advanced”.

Assessments of all standards will be graded as follows:

Score	Mastery Level	Student work
4	Perfect Mastery	Demonstrates complete understanding of the underlying concept and provides correct solution with appropriate notation and use of language
3	Imperfect Mastery	Demonstrates complete understanding of the underlying concept but has minor errors in calculation and/or problems with notation and use of language
2	Developing	Demonstrates developing but incomplete understanding of the concept and/or major errors in the computation and presentation of the solution
1	Novice	Demonstrates little to no understanding of the concept with some relevant computations
0	No evidence	Demonstrates no evidence of understanding or not attempted

The initial assessment for all standards will be in class as indicated in the course schedule. If you do not demonstrate mastery of a standard during the in-class assessment, you will have an opportunity to reassess the standard in the Germantown Assessment Center the following week as indicated in the attached schedule. Any standards which you have not shown mastery on during the course of the semester (either in-class or reassessed at the Assessment Center) will be put on your final exam. The final exam for this class is on Tuesday, December 17, 10:15 am – 12:15 pm.

## C. Standards

Final letter grades will be determined according to this rubric:

Core Standards	Advanced Standards	Final Grade
Mastery on all	Average score is 3 or above	A
Mastery on all	Average score is between 2 and 3	B
Mastery on all	Average score is below 2	C
Not all mastered Average score is 2 or above	Not applicable	D
Not all mastered Average score is below 2	Not applicable	F

Note:

- Mastery means a score of 3 or 4.
- For the grades of A, B, or C, you must demonstrate mastery on ALL Core Standards.
- Advanced Standards are NOT considered for final grade determination until ALL Core Standards are mastered.

### D. Make-up Policy

Make-ups for missed assessments will not be available. You have a total of three opportunities to assess on each standard as described in Section B. Course Grade. The final exam on Tuesday, December 17, 10:15 am –12:15 pm is the last opportunity to assess for all standards except those from Sections 7.3, 7.4, and 7.5.

## VI. Honors Module

This class has an attached honors module for eligible students. Enrollment is limited to students who meet Honors Program eligibility standards. If you are interested in taking this as an honors class, you must meet with the instructor during the first two weeks of classes.

### A. Eligibility

- SAT score of 600 or above on each section  
OR
- Completion of at least 12 Montgomery College credits
- Cumulative 3.2 grade point average or higher
- Grade of A or B in ENGL 101 or ENGL 101A or Eligible for ENGL 102

Alternative criteria can be evaluated by the Campus Honors Program Coordinator:  
Dr. Christina Devlin, PK139, 240-567-6925 <[christina.devlin@montgomerycollege.edu](mailto:christina.devlin@montgomerycollege.edu)>

## VII. Other Important Information

### A. Important Student Information Link

In addition to course requirements and objectives that are in this syllabus, Montgomery College has information on its web site (see link below) to assist you in having a successful experience both inside and outside of the classroom. It is important that you read and understand this information. The link below provides information and other resources to areas that pertain to the following: student behavior (student code of conduct), student e-mail, the tobacco free policy, withdraw and refund dates, disability support services, veteran services, how to access information on delayed openings and closings, how to register for the Montgomery College alert System, and finally, how closings and delays can impact your classes. If you have any questions please bring them to your professor. As rules and regulations change they will be updated and you will be able to access them through the link. If any student would like a written copy of these policies and procedures, the professor would be happy to provide them. By registering for this class and staying in this class, you are indicating that you acknowledge and accept these policies.

<http://cms.montgomerycollege.edu/mcsyllabus/>

### B. Basic Needs Statement

Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live, is urged to contact the Dean of Students Affairs on

your campus. Furthermore, please notify the professor if you are comfortable in doing so. This will enable the professor to provide any resources that they may possess. We know this can affect performance in the course and Montgomery College is committed to your success.

### The Deans of Student Affairs

Germantown	Dr. Jamin Bartolomeo	<a href="mailto:jamin.bartolomeo@montgomerycollege.edu">jamin.bartolomeo@montgomerycollege.edu</a>
Rockville	Dr. Tonya R. Mason	<a href="mailto:tonya.mason@montgomerycollege.edu">tonya.mason@montgomerycollege.edu</a>
Takoma Park / Silver Spring	Dr. Clemmie Solomon	<a href="mailto:clemmie.solomon@montgomerycollege.edu">clemmie.solomon@montgomerycollege.edu</a>

### C. Student Health and Wellness and Fuel for Success

This website offers information about resources for food on our campuses and in the community and has links for community resources. The site offers the schedule for the mobile markets, locations of the food pantries as well as a link for those who wish to contribute their time or money to support our students

<http://cms.montgomerycollege.edu/student-health-and-wellness/fuel-for-success/>

### D. Campus Food Pantries

Campus	Pantry Location	Days & Hours of Operation
<b>Germantown</b>	<i>High Tech (HT) Food Pantry</i> In the hallway, near HT300	9:00 a.m. - 5:00 p.m.
<b>Rockville</b>	<i>Women's' and Gender Studies Program Food Pantry</i> Hallway outside of MT212 --- <i>Biology Department Food Pantry</i> Science Center, 2 <sup>nd</sup> floor hallway	Monday-Friday 9:00 a.m. - 5:00 p.m. --- Monday-Friday 9:00 a.m. - 5:00 p.m.
<b>Takoma Park/Silver Spring</b>	<i>Commons Food Pantry</i> CM 110 <i>Institute for Justice, Race and Civic Engagement Food Pantry</i>  Pavilion 4, #202 <a href="mailto:Vincent.intondi@montgomerycollege.edu">Vincent.intondi@montgomerycollege.edu</a>	Monday - Thursday 8:00 a.m. - 7:00 p.m. Saturdays 9:00 a.m. - 1:00 p.m. Monday and Wed: 12:30-4 Tuesday and Thursday: 2-4

## VIII. Schedule

### A. Drop Deadlines

September 09, 2019 Refund Drop Deadline	September 23, 2019 No Grade Drop & Audit/Credit Deadline	November 18, 2019 W Grade Drop Deadline
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## B. Meeting Schedule

Class	Date	Topic	Section	Assessments	Reassessment
1	Tuesday, Sep 03	Intro and FTC	5.3 & 5.4		
2	Thursday, Sep 05	The Substitution Rule	5.5		
3	Tuesday, Sep 10	Integration by Parts	5.6	5.5	
4	Thursday, Sep 12	Additional Techniques of Integration Integration Tables and CAS	5.7 & 5.8		
5	Tuesday, Sep 17			5.6	5.5
6	Thursday, Sep 19	Approximate Integration	5.9		
7	Tuesday, Sep 24	Improper Integrals	5.10	5.7 - 5.9	5.6
8	Thursday, Sep 26	Area	6.1		
9	Tuesday, Oct 01	Volume	6.2, 6.3	5.10, 6.1	5.7 - 5.9
10	Thursday, Oct 03				
11	Tuesday, Oct 08	Arc Length, Average Value	6.4, 6.5	6.2, 6.3	5.10, 6.1
12	Thursday, Oct 10	Selected Applications	6.6 - 6.8		
13	Tuesday, Oct 15			6.4, 6.5	6.2, 6.3
14	Thursday, Oct 17	Polar Coordinates	Appendix H		
15	Tuesday, Oct 22	Sequences	8.1	6.6 - 6.8, Ap. H	6.4, 6.5
16	Thursday, Oct 24	Series	8.2		
17	Tuesday, Oct 29	Testing Series	8.3 & 8.4	8.1, 8.2	6.6 - 6.8, Ap. H
18	Thursday, Oct 31				
19	Tuesday, Nov 05			8.3	8.1, 8.2
20	Thursday, Nov 07	Power Series	8.5 & 8.6		
21	Tuesday, Nov 12			8.4	8.3
22	Thursday, Nov 14	Taylor Series	8.7 & 8.8		
23	Tuesday, Nov 19	Taylor Polynomials		8.5, 8.6	8.3, 8.4
24	Thursday, Nov 21	Modeling with Differential Equations	7.1		
25	Tuesday, Nov 26	Direction Fields and Euler's Method	7.2	8.7, 8.8	8.5, 8.6
<i>Thanksgiving Break</i>					
26	Tuesday, Dec 03	Separable Equations	7.3	7.1, 7.2	8.7, 8.8
27	Thursday, Dec 05	Exponential Growth and Decay	7.4		
28	Tuesday, Dec 10	The Logistic Equation	7.5	7.3, 7.4	7.1, 7.2
29	Thursday, Dec 12	Predator-Prey Systems	7.6	7.5	
30	Tuesday, Dec 17	<b>Final Exam (10:15 am – 12:15 pm)</b>			
Notes:	<p><i>Section 7.6 will not be assessed.</i></p> <p><i>Sections 7.3, 7.4, and 7.5 will be reassessed on the final exam.</i></p> <p><i>Final assessments for 7.3, 7.4, and 7.5, will be scheduled individually during Final Exam Week as needed.</i></p>				

*The professor reserves the right to make changes to this syllabus.*

*Last Updated August 28, 2019*