

## COURSE SYLLABUS

Spring 2020

**COURSE:** Math 171 Section #8835  
Calculus 1  
1:30 – 2:45 M T W\* Th  
Sierra 222

**INSTRUCTOR:** Angela Pignotti, Ph.D.  
**OFFICE:** SCC 344 (3<sup>rd</sup> floor)  
**OFFICE HOURS:** MTWTh 9 am – 10 am  
Mon 3 – 4 pm or by appointment  
**EMAIL:** [pignottia@yosemite.edu](mailto:pignottia@yosemite.edu)  
**WEBPAGE:** <http://people.mjc.edu/pignottia>

**TEXT:** Calculus with Early Transcendentals, 8<sup>th</sup> ed, by J. Stewart, Cengage. ISBN: 9781285741550  
Students have choice of loose-leaf or hardbound text.

**PREREQUISITES:** Satisfactory completion of Math 161 and Math 162 or equivalent or qualification by MJC assessment process.

**MATH 181:** *This 1-unit course is critical to your success.* 1-unit support class Problem Solving for Calculus 1. All review for quizzes, exams and discussion of homework problems will take place in Math 181. The 4-unit Math 171 class is primarily lecture with no exam review and little, if any, time for homework questions or problem solving. Math 181 is a one-unit course, transferable to CSU campuses and is a pass/no pass course.

**CREDIT:** 4 units + 1-unit support class - Math 181 section 8836 (Add code: 2146)

**COURSE OBJECTIVE:** In this course, we will cover fundamental foundations of differential and integral calculus. Topics include limits, continuity, differentiation, curve sketching, applications of differentiation, integration, the Fundamental Theorem of Calculus, and applications of integration.

### **COURSE REQUIREMENTS:**

- 1. Attendance:** Students are expected to attend every class meeting. Attendance will be taken at each class meeting. Make sure you **sign** the attendance roster at each class meeting. If you miss **4 or more classes**, you may be dropped from this course.
- 2. Homework:** Each section of the textbook has problems designed to build and reinforce your skill in that topic. It is essential to your success in this course that you devote the necessary time daily to keep up with homework assignments. Plan approximately 3 hours of homework for each hour of class. The material in the textbook should be read before attempting to complete homework assignments.

Homework is administered on an online system called, WebAssign (WA). WA requires purchase of an access code. An access code can be purchased online or with a text bundle at bookstore.

All enrolled and waitlisted students **must register onto WebAssign by Friday, January 17<sup>th</sup>** or you will be dropped from the course or waitlist. Use your **MJC student email account** when creating your WA account.

#### **Access WebAssign**

Website: <https://www.webassign.net/wa-auth/login>

Course Name:

**MATH 171, Spring 2020**

Course Key:

**modesto 9254 2061**

How to Register

[Registration Instructions Link](#)

For Technical Help

[Cengage \(WebAssign\) Support](#)

- 3. Quizzes and/or homework packets:** Quizzes based on assigned homework will be given throughout the semester. **Makeup quizzes will not be given.** To account for this, one quiz score will be dropped at the end of the semester.
- 4. Exams:** Four exams will be given during the semester. Each exam will cover 1 – 2 chapters. You must bring a scientific calculator to all exams. **Makeup exams will not be offered.**

5. **Final exam:** There will be a comprehensive final for the class on **Tuesday, Apr 28<sup>th</sup> from 1 pm - 3:50 pm**. If you cannot make the exam, you need to drop this class now.

**REQUIRED MATERIAL:**

A simple scientific calculator capable of logarithmic operations is needed for the tests and quizzes, but you will probably want a graphing calculator or a good graphing smartphone app to use outside of tests and quizzes. Just be aware that you can't use your phone on a test or a quiz. MJC has a FREE calculator loan program available. Calculators can be checked out in the east & west campus libraries. It is administered on a first come first serve basis. Bring your class schedule and don't delay. I recommend that students use a **3-ring binder with dividers** for storing notes, homework, returned exams and quizzes.

**RESOURCES FOR SUCCESS:**

1. **Enroll in Math 181 – Problem Solving For Calculus 1.** This one unit course is **CRITICAL** to your success in the course. All review for your quizzes, exams and homework will **ONLY** take place in the Math 181 section. Materials from this 1- unit class will not be shared with Math 171 students. The 4-unit 171 class is primarily lecture with little, if any, time for homework questions or problem solving.
2. Come to my drop-in office hours or make an appointment if these do not suit your schedule.
3. Drop-In Tutoring Centers, East and West Libraries.
4. Study Groups Study groups are strongly encouraged.

**EVALUATION**

Quizzes and homework	12%	% of total points earned	Grade earned
Exams	58%	90-100	A
Comprehensive Final	30%	80-89	B
Total	100%	70-79	C
		60-69	D
		Below 60	F

**COURSE OVERVIEW:**

- Chapter 1: Functions and Models (Review)
- Chapter 2: Limits and Derivatives
- Chapter 3: Differentiation Rules
- Chapter 4: Applications of Differentiation
- Chapter 5: Integrals

**NOTES:**

**Professor Drop for lack of Class Participation**

State law allows the instructor of record (me) to drop students for “lack of participation.” Students may be dropped from class for any of the following reasons:

- Absent for any four days of class and/or missing assignments.
- Miss any exam without prior notification.

**Note: It is your responsibility to drop this class if you stop attending.**

**Emergencies:** Things happen. If an emergency happens that affects your performance in some way, please let me know via phone or email as soon as possible. If you are unable to see me in person, then email me or have a family member or friend contact me by email to explain. This is especially true regarding submission deadlines and exam days.

### **CLASSROOM EXPECTATIONS:**

- Withdrawal from a course is the student's responsibility. However, if attendance is irregular, then by college policy, the student may be withdrawn from the course. I reserve the right to withdraw any student who misses **4 or more** class meetings. Please notify me if you have a long-term illness or situation that is interfering with your attendance in this course. If you decide to drop the course, it is your responsibility to complete the necessary paperwork.
- Students are expected to conduct themselves in accordance with standards which are designed to perpetuate the educational purpose of college. Cheating of any kind will not be tolerated-- depending on the circumstances, I can and will take any or all of the following actions: a score of zero will be recorded for that exam/assignment, a grade of F will be assigned as grade in the course, the student will be reported to the area dean.
- You must arrive on time and stay the entire class period. In the rare event that you are late, please enter the classroom quietly and sit near the entrance. **Do not walk in front of the seated classroom.**
- A verbal warning will be given on the first incidence where a student is being disruptive. On the next occasion of disruptive behavior the student will be dismissed from that class period and the following class meeting. Also, the division dean will be notified, and a student conduct report will be filed.
- Students may not leave the classroom once class has begun. Entering and exiting the classroom disrupts the class. Disruptions are not allowed. Please see me if you have a medical condition or are sick prior to the start of class.

### **COURSE LEARNING OUTCOMES:**

Upon satisfactory completion of MATH 171, the student should be prepared to:

1. Analyze and solve level appropriate problems including calculating limits, derivatives, integration, and applications.
2. Effectively communicate, using appropriate mathematical notation, processes and strategies in solving level appropriate problems including calculating limits, derivatives, integration, and applications.

*Tentative Course Schedule – subject to change*

Week	Monday	Tuesday	Weds - Math 181	Thursday
1	13-Jan Introduction 1.1 - Review	14-Jan Review: 1.2, 1.3 and Absolute-value Rules	15-Jan MATH 181	16-Jan 1.4, 1.5 - Review
2	20-Jan <i>Martin Luther King Holiday</i>	21-Jan 2.1 Tangent Problems	22-Jan MATH 181	23-Jan 2.2 Limit of a Function
3	27-Jan 2.3 Limit Laws	28-Jan 2.4 Precise Definition of a Limit	29-Jan MATH 181	30-Jan 2.5 Continuity
4	3-Feb 2.6 Limits at Infinity	4-Feb 2.7 Derivatives as Rate of Change	5-Feb <i>Review for Exam 1</i>	6-Feb 2.8 Derivatives as Functions
5	10-Feb <b>Test 1</b> Chapter 1 and 2	11-Feb 3.1 Polynomial Exponential Derivatives	12-Feb MATH 181	13-Feb 3.2 Product Quotient Rule
6	17-Feb <i>President's Day Holiday</i>	18-Feb 3.3 Trig Function Derivatives	19-Feb MATH 181	20-Feb 3.4 Chain Rule
7	24-Feb 3.5 Implicit Differentiation	25-Feb 3.6 Derivatives of Logs	26-Feb MATH 181	27-Feb 3.8 Exponential Growth
8	2-Mar 3.9 Related Rates	3-Mar 3.9 Related Rates	4-Mar <i>Review for Exam 2</i>	5-Mar 3.10 Linear Approximations
9	9-Mar <b>Test 2</b> Chapter 3	10-Mar 4.1 Max and Min Values	11-Mar MATH 181	12-Mar 4.2 Mean Value Theorem
10	16-Mar 4.3 Derivative and Graphs	17-Mar 4.4 L'Hospital's Rule	18-Mar MATH 181	19-Mar 4.5 Curve Sketching
11	23-Mar 4.7 Optimization	24-Mar 4.7 Optimization	25-Mar <i>Review for Exam 3</i>	26-Mar 4.8 Newton's Method
12	30-Mar <b>Test 3</b> Chapter 4	31-Mar 3.11 Hyperbolic Functions	1-Apr MATH 181	2-Apr 4.9 Antiderivatives
13	6-Apr 5.1 Areas and Distances	7-Apr 5.2 Definite Integral	8-Apr MATH 181	9-Apr 5.3 Fundamental Thm of Calculus
14	13-Apr 5.4 Indefinite Integrals	14-Apr 5.5 Substitution Rule	15-Apr <i>Review for Exam 4</i>	16-Apr 5.5 Substitution Rule
15	20-Apr <b>Test 4</b> Chapter 5	21-Apr <i>Catch-up and Review</i>	22-Apr Review	23-Apr <i>Review</i>
16	27-Apr	28-Apr <b>Final Exam</b> <b>1 pm to 3:50 pm</b>	29-Apr	30-Apr