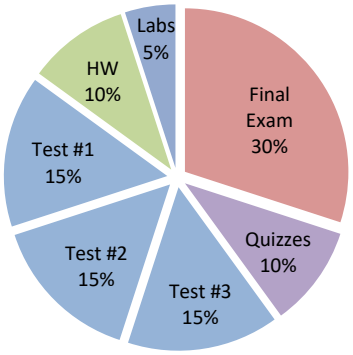
Math 180 Syllabus

Fall 2017

CLASS INFO	PROFESSOR INFO	
Calculus and Analytic Geometry	Name:	David Beydler
TTh 1:00-3:05pm	Office Hours:	M 2-3pm, TTh 10-10:30am, 3:30-4:30pm
Section 7 (CRN 22462)	Office:	61-1608 (Building 61, Room 1608)
Classroom: 61-3419	Phone:	909-274-4669
http://davidsmath.com/math180-07/	E-mail:	dbeydler@mtsac.edu

GRADING INFO

Homework:	10%
Labs:	5%
Quizzes:	10%
Test #1:	15%
Test #2:	15%
Test #3:	15%
Final Exam:	30%



You'll get an A, B, C, D, or F based on these overall percentages:

90-100%: A
80-89%: B
70-79%: C
60-69%: D
0-59%: F

Homework: Homework will be collected weekly (see class website for assignments). You must show work to get credit. You can turn in up to 2 homework assignments one week late. Also, your lowest 2 homework assignments will be dropped.

Labs: There will be 2 computer lab assignments. The software for the labs is downloadable for free and is installed on the computers in the TMARC computer lab, which is located on the first floor of Building 61 (our classroom's building). Due dates will be announced.

Quizzes: There will be some quizzes, usually at the end of class. See the Tentative Schedule for quiz dates. No make-up quizzes will be given. Your lowest quiz score will be dropped.

Tests: We'll have 3 tests on Sept 28 (Thurs), Oct 26 (Thurs), and Nov 30 (Thurs). No make-up tests will be given. I'll replace your lowest test percentage with your final exam percentage (if your final exam percentage is higher).

Final Exam: The final exam will be cumulative and will be on Tuesday, December 12, 1:30pm-4:00pm. No make-up final will be allowed.

Extra Credit:

1. Scavenger Hunt: If you complete the Scavenger Hunt handout at the beginning of the semester, you'll get an extra 1% towards your first test. The due date is Sept 14 (Thurs).
2. Tutoring: If you spend 8 hours at the TMARC (Transfer Math Activities Resource Center) or other tutoring center on campus, you'll get an extra 1% towards the next upcoming test (including the final exam).
3. Review Problems: Before each test and the final exam, I'll give you a set of review problems to work on. They'll be due at each test, and depending on completeness and neatness can be worth up to 3% extra credit towards that test (including the final exam).

GENERAL POLICIES

Calculators: You'll need a *scientific* calculator for certain parts of the homework, quizzes, tests, and final exam. You will not be allowed to use any other electronic devices, such as cell phones, graphing calculators, computers, etc. If you're not sure, check with me ahead of time whether your calculator is acceptable or not. You will not be allowed to share a calculator during quizzes, tests, and the final exam.

Also, no books or notes will be allowed during the quizzes, tests, and final exam.

Classroom: My goal is to keep the classroom environment focused on learning math (after all, that's what you signed up for!). So, the basic rules are: don't disrupt others during class, and respect your fellow classmates and teacher (me!). Please eat before or after class, or during breaks. Turn cell phones off/silent.

I will post handouts and quiz/test solutions on the class website (see Class Info).

MISCELLANEOUS

Textbook: *Calculus* (Early Transcendentals, 8th Edition), Stewart.

Prerequisites: MATH 160 or qualifying score on current department placement test.

Description: Differential and integral calculus with applications. Functions, limits, the derivative, curve sketching, optimization, rules for differentiation of algebraic, exponential, logarithmic, and trigonometric functions with their inverses, with applications. Indefinite and definite integrals.

Objectives:

1. Represent functions verbally, algebraically, numerically and graphically. Construct mathematical models of physical phenomena. Graph functions with transformations. Use logarithmic and exponential functions in applications. Solve calculus problems using a computer algebra system.
2. Prove limits using properties of limits and solve problems involving the formal definition of the limits. Solve problems involving continuity of functions. Evaluate limits at infinity and represent these graphically. Use limits to find slopes of tangent lines, velocities, other rates of change and derivatives.
3. Compute first and higher order derivatives of polynomial, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Evaluate derivatives using the product, quotient and chain rules and implicit differentiation.
4. Apply derivatives to rates of change and related rates problems, linear approximations and differentials, increasing and decreasing functions, maximum and minimum values, inflections and concavity, graphing, optimization problems, and Newton's Method. Apply the Mean Value Theorem in example problems. Use L'Hospital's Rule to evaluate limits of indeterminate forms. Use a Computer Algebra Systems in applications of calculus.
5. Evaluate indefinite integrals and definite integrals using the Fundamental Theorem of Calculus. Evaluate integrals using the substitution rule and integration by parts.

Student Learning Outcomes:

1. Students can differentiate algebraic and transcendental functions.
2. Students can solve optimization problems.

3. Students can compute instantaneous rates of change in applications.
4. Students can evaluate integrals of elementary functions using the method of substitution.

Accommodations: Students with disabilities should be sure to contact the DSP&S Office. Also, please feel free to stop by my office so we can discuss your particular learning needs.

Academic Honesty: Don't cheat. It's wrong and it's not worth it. I will follow the policy as outlined in the school catalog (see http://www.mtsac.edu/catalog/), and will report any student misconduct to the Office of Student Life. Also, you'll receive a zero score on the assignment/exam.

TUTORIAL SERVICES

Free tutorial services are available in the TMARC (Building 61, first floor). For details, check out: http://www.mtsac.edu/marc

Free tutorial services are also available at the LAC (Learning Assistance Center) in the library (Building 6). For details, see: http://www.mtsac.edu/instruction/learning/lac/services.html#tutorial

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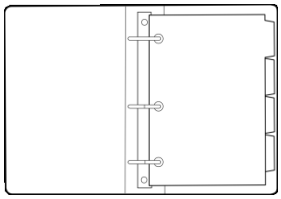
STUFF TO GET

1. 3-ring binder (*1.5-inches* is best if you keep everything in it—trust me)
2. Scientific calculator
3. Pencils and erasers
4. Textbook





FAQ

Q: Do you offer make-up quizzes/exams?
A: No. However, your lowest quiz will be dropped. Also, if you miss a test for any reason, I'll replace the test with the final exam percentage.

Q: Will I need Scantrons?
A: Nope.

Q: Will the final exam cover everything?
A: Yep.

Q: How do you pronounce your last name?
A: The "Bey" is pronounced like "Bye!" But don't worry about this!

Note: Any of the information in this syllabus could change anytime. I'll try to e-mail important announcements and post them on the website, but ultimately you are responsible for announcements made in class. So, I'd recommend getting the phone number and/or e-mail address of a classmate or two.

CLASSMATE CONTACT INFO

Name: _____ Name: _____

Phone: _____ Phone: _____

E-mail: _____ E-mail: _____
