Math 181 Syllabus
Fall 2018

CLASS INFO	PROFESSOR INFO
Calculus and Analytic Geometry	Name: David Beydler
MW 6:45-8:50pm	Office Hours: M 12-2pm, T 1-2pm, Th 1-2pm
Section 7 (CRN 22225)	Office: 61-1608 (Building 61, Room 1608)
Classroom: 61-3419	Phone: 909-274-4669
http://davidsmath.com/math181/	E-mail: dbeydler@mtsac.edu

GRADING INFO

Homework: 8%	
Labs: 2%	
Test #1: 20%	
Test #2: 20%	
Test #3: 20%	
Final Exam: 30%	
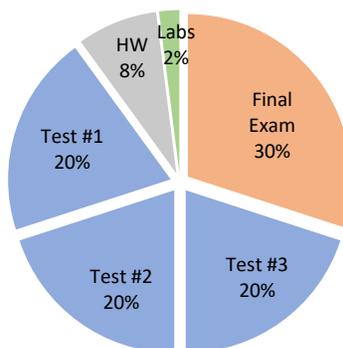
You'll get an A, B, C, D, or F based on these overall percentages:

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 3 homework assignments late.

Labs: There will be 2 computer lab assignments. The software for the labs, GeoGebra, is downloadable for free at geogebra.org 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.

Tests: We'll have 3 closed book/notes tests on Sept 26 (Wed), Oct 24 (Wed), and Nov 28 (Wed). 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 closed book/notes final exam will be cumulative and will be on Monday, December 10, 7:30pm-10:00pm. 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 12 (Wed).
2. Tutoring: If you spend 8 hours at a tutoring center on campus, you'll get an extra 1% towards the next upcoming test (including the final exam). The main free math tutoring centers on campus are:
   - TMARC (Transfer Math Activities Resource Center) – Building 61, 1st floor – http://www.mtsac.edu/marc
   - LAC (Learning Assistance Center) – Building 6, 1st floor – http://www.mtsac.edu/lac/tutorialservices.html
3. Review Exercises: 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 2% extra credit towards that test (including the final exam).

MISCELLANEOUS

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

Prerequisites: MATH 180.

Description: Differential and integral calculus with infinite series and applications. Includes applications of integration, techniques of integration, numerical integration, indeterminate forms and improper integrals, differential equations, and polar coordinates.

Objectives:
1. Use definite integrals to calculate areas between curves, volumes - including solids of revolution, work, the mean value of functions, arc lengths, areas of surfaces of revolution, moments, centers of mass, and other physics applications.
2. Evaluate indefinite and definite integrals (proper and improper) using integration by parts, trigonometric identities and substitutions, partial fractions, tables, computer algebra systems, and numerical techniques.
3. Solve separable differential equations with applications.
4. Plot curves parametrically and in polar coordinates, using calculus to compute associated areas, arc-lengths, and slopes.
5. Test for convergence for sequences and series using the integral, comparison, alternating series, ratio, and root tests.
6. Determine representations of functions as power series including Taylor and Maclaurin series.
7. Use power series in applications.

Student Learning Outcomes:
1. Students can integrate algebraic and transcendental function using a variety of techniques.
2. Students can apply the definite integral to applications.
3. Students can determine convergence of infinite series of various forms using various techniques.
4. Students can describe objects algebraically and geometrically in various 2- or 3-dimensional coordinate systems.

Accommodations: Students requesting accessibility accommodations should be sure to contact the Accessibility Resource Centers for Students (http://mtsac.edu/access). 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.

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
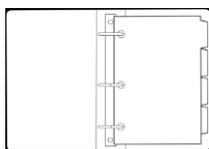
FAQ

Q: Do you offer make-up exams?
A: No. However, 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: _____