

# Math 181 Syllabus

Fall 2017

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## CLASS INFO

Calculus and Analytic Geometry

MW 4:30-6:35pm

Section 4 (CRN 22467)

Classroom: 61-3419

<http://davidsmath.com/math181-04/>

## PROFESSOR INFO

Name: David Beydler

Office Hours: M 2-3pm, TTh 10-10:30am, 3:30-4:30pm

Office: 61-1608 (Building 61, Room 1608)

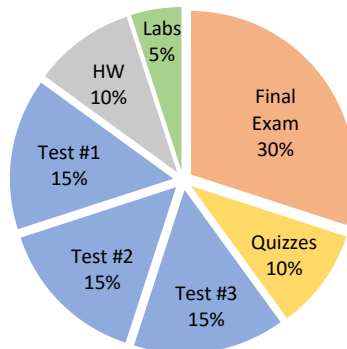
Phone: 909-274-4669

E-mail: [dbeydler@mtsac.edu](mailto:dbeydler@mtsac.edu)

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## GRADING INFO

<b>Homework:</b>	10%
<b>Labs:</b>	5%
<b>Quizzes:</b>	10%
<b>Test #1:</b>	15%
<b>Test #2:</b>	15%
<b>Test #3:</b>	15%
<b>Final Exam:</b>	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 27 (Wed), Oct 25 (Wed), and Nov 29 (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 final exam will be cumulative and will be on Monday, December 11, 4:30pm-7:00pm. 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 13 (Wed).
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).

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## 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).

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## MISCELLANEOUS

**Textbook:** *Calculus* (Early Transcendentals, 7th 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. Differentiate hyperbolic functions and integrate functions that result in hyperbolic forms.
3. 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.
4. Solve separable differential equations with applications.
5. Plot curves parametrically and in polar coordinates, using calculus to compute associated areas, arc-lengths, and slopes.
6. Test for convergence for sequences and series using the integral, comparison, alternating series, ratio, and root tests.
7. Determine representations of functions as power series including Taylor and Maclaurin series.
8. 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 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.

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## TUTORIAL SERVICES

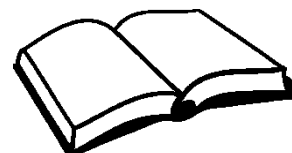
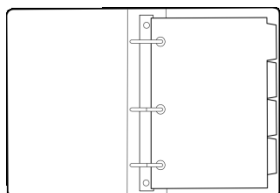
**Free** tutorial services are available in the TMARC (Building 61, first floor). For details, check out: <http://www.mtsac.edu/marc>

**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



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## 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!

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**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.

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**CLASSMATE CONTACT INFO**

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

E-mail: \_\_\_\_\_