Math 5B
Spring 2016
Section # 92111 and 92112

Instructor: Dave Reynolds  
website: www.cabrillo.edu/~dreynolds

Course Title: Analytic Geometry and Calculus II  
phone: 479-6499 (email is better)

class Meeting Times: MW 8-10:25am, Room 825  
and TTh 8:30-10:55am, Room 825

e-mail: dareynol@cabrillo.edu

Office Hours: MW 10:30-11:00 am in Room 825  
M 1:40-2:45 in the STEM Center  
W 1:40-2:45 in Room 714A  
TTh 7:00-8:15 in Room 714A

Prerequisite: Math 5A or equivalent skills

Text: Calculus Early Transcendentals (7th or California Edition), Stewart

Attendance: Attendance is required for the entire class period, every class period. You may be dropped for lack of attendance. There will be homework or in class work assigned at every class meeting.

Learning Outcomes

1. Formulate and evaluate definite integrals, especially in finding areas, volumes, arc lengths and surface areas and applications from physics including work and hydrostatic pressure.
2. Evaluate definite and indefinite integrals by employing various techniques of integration including integration by parts, trigonometric substitution and partial fractions.
3. Evaluate infinite series to decide on convergence, including absolute convergence and the radius of convergence, and generate infinite series, including Taylor series, to estimate function values and find derivatives and antiderivatives.

There is a large body of educational research which shows that active involvement with the material is the only way to gain true understanding of mathematical concepts. Listening to lectures does very little to help students with conceptual understanding of mathematics or to help them apply mathematics to real-life situations. Active involvement with the subject matter will bring positive results. With that in mind, students will be working together in groups frequently in class discussing problems together. Students are also encouraged to work together on homework assignments. Also, free tutoring is available at the Math Learning Center in Room 1074, in the STEM Center in Room 834, and in the ILC at Watsonville. Check with them for available tutors and times.

Evaluation: The final grade will be based on the following scale:

- 693 - 770 = A
- 616 - 692 = B
- 539 - 615 = C
- 462 - 538 = D
- 461 or lower = F
Tests: There will be 3 midterm tests worth 150 points each, and 1 final exam worth 250 points. The final exam will be cumulative. The midterm examinations will each cover a specific section of the class. Tests should not be missed. Should you miss a test with a verifiable excuse, I will omit that test. In this case, your final exam will be worth 400 points. If you miss more than one test, you will receive a 0 on your tests. **There are no make-up tests.**

(700 points)

Homework: Homework will be assigned everyday in class. Homework will be due approximately every two weeks (exact due dates will be announced in class). Homework will be graded on mostly on completeness (meaning you do all of the problems and show all of the work). Homework needs to be done neatly and in an organized manner. If I cannot read your homework, I cannot grade your homework, and your score will be lower. **Late homework will be accepted for a MAXIMUM of half credit.** Please staple your homework before you come to class. Homework will be worth a total of 70 points.

Classwork: Time permitting, every day in class I will assign certain problems to be worked out in groups. In situations where we have extra time, I will call on groups to present their solutions to certain problems to the rest of the class. Classwork is your chance to work with others (and with me present) so that you can practice concepts before you attempt your homework.

Use of Technology: You will be allowed to use a scientific calculator in this course on quizzes and exams. You will NOT be allowed to use a graphing calculator on quizzes and exams in this class. **You may not use a cell phone in class - use of a cell phone or a graphing calculator during a quiz or a test is considered cheating.** If you want to use the restroom during a test or a quiz, you must leave your cell phone with me.

Academic Integrity: Cheating will not be tolerated. While students are encouraged to work in groups on assignments, each student must turn in their own work. If a student is caught cheating on a test or a quiz, the student will receive a 0 on the assignment. A second occurrence will result in a failing grade for the course.

Method of Instruction: Classroom lecture and group practice.

Course Expectations: To succeed in this course, a student must:

1) Devote a minimum of 10 hours per week outside class to this course

2) Attend every class

3) Come to class prepared and willing to help classmates

4) Seek help from me or other students when necessary

5) Understand that assigned homework is the minimum necessary for success in this class – some students will require more practice than others.

6) Understand that studying for a mathematics test is not like studying for other classes – students must actually do problems to understand concepts.

Contact Information: The easiest way to get in touch with me is by email at dareynol@cabrillo.edu. You can also reach my office at 479-6499.

Accommodations
Students needing accommodations should inform the instructor. As required by the Americans with Disabilities Act (ADA), accommodations are provided to insure equal access for students with verified disabilities. To determine if
you qualify or need assistance with an accommodation, please contact ACCESSIBILITY SUPPORT CENTER (Formerly DSPS), Room 1073, (831)479-6379.

Our Final: **Wednesday, May 18** from 7:00-9:50am for the MW section

Thursday May 19 from 7:00-9:50am for the TTh section

This syllabus is subject to change. Should a change occur, I will notify you in class.