

DEPARTMENT OF MATHEMATICS
California State University, Bakersfield
MATH 2520 – Calculus 2 – Section 3 (CRN 31428)

Instructor: Charles Lam

Office: SCI-3 209

Phone: (661) 654 2403

Email: clam@csub.edu

Homepage: <http://www.csub.edu/~clam>

Class times: M 4-4:50 (DDH 104K), TR 4-5:15 (SCI 2-179)

Office Hours: MT 2-4, R 1-2 or drop by when I am in my office.

Course Description: This is the second course in calculus, topics include integration and its applications, sequences, and series.

Course Objectives: At the end of the course, students will be able to

- (1) Introduction of the definite integral through the use of Riemann sum.
- (2) Apply the Fundamental Theorem of Calculus to evaluate definite integrals.
- (3) Without the help of any computer algebra systems, learn the techniques of integration.
- (4) Learn the concept of improper integrals, and methods of evaluation.
- (5) Applications of integration, including area, volume and average value of a function.
- (6) Introduction to infinite sequences, learn the concepts of boundedness and convergence of a sequence.
- (7) Detailed analysis of series starting with partial sums. Determine the convergence or divergence of a series by using various techniques, including the integral test, comparison test, limit comparison test and the ratio test. Study the analysis of alternating series.
- (8) Introduction of power series, in particularly, the Taylor and Maclaurin series

Text: Calculus – Concepts and Contexts, 4th ed., by James Stewart. Please note that if you do not plan to take Calculus 3 or above, the text *Single Variable Calculus, Concepts and Contexts, 4th ed* will be sufficient.

Topics covered: Sections 5.6, 5.7, Appendix G, 5.9, 5.10, 6.1-6.4, 1.7, 3.4, Appendix H1, H2, 7.1-7.4, 8.1-8.7.

Web page: The web page for the course is at <http://www.csub.edu/~clam/math2520s17.html>

Student Activity: Student Activity are conducted on every other week. You are required to work in groups of 3-5 on assigned problems and hand in the lab reports **individually** at the end of Student Activity. One lab will be graded at random from each group, and every group member will be assigned the same grade.

Homework: Weekly homework will be given, you will have one week to finish homework.

Quiz: There will be short quizzes, and will be announced one class ahead.

Grading: In addition to student activity and homework, there will be two tests, and a final exam (cumulative). A pass (50%) in the final exam is required to obtain a final grade of D- or better. A 60% in the final exam is required to obtain a final grade of C- or better.

Student Activity	10%
Homework	10%
Quiz	10%
Test 1	20%
Test 2	20%
Final Exam	30%

Test Dates:

- First Test: February 28, Tuesday (tentative)
- Second Test: April 18, Tuesday (tentative)
- Final Exam: May 17, Wednesday, 2-4:30pm

Remarks:

- There will be no make-up exams or tests. If you know in advance that you are going to miss an exam, please make your arrangements with me at least one week ahead.
- Please hand in labs and homework on time. Late labs and homework will be accepted up to the beginning of next class for 50% of credit.

Academic Dishonesty:

You are encouraged to work with your classmates in labs and homework. However, YOU ARE REQUIRED TO HAND IN WORK WRITTEN BY YOURSELF. A rule of thumb is to destroy any evidence of discussion before writing up the solutions yourself.

If you collaborated with anyone, ACKNOWLEDGE COLLABORATORS. Please also note that, ACKNOWLEDGING YOUR FRIENDS ON THE CONTRIBUTION DOES NOT MEAN YOU HAVE THE RIGHT TO COPY OTHERS' WORK. YOU MUST WRITE THE SOLUTIONS IN YOUR OWN WORDS.

Please refer to university catalog section "Student Conduct" on university policy on academic dishonesty.