DEPARTMENT OF MATHEMATICS California State University, Bakersfield MATH 202 – Calculus 2 – Section 1

Instructor: Charles Lam

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Class times: 6-9TR (WSL 003)

Office Hours: 11:30-12:30MW, 2-3:30MR, or drop by when I am in.

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) appreciate the concept of the definite integral through the use of Riemann sum.
- (2) apply the Fundamental Theorem of Calculus to evaluate definite integrals.
- (3) apply the techniques of integration, without the help of any computer algebra systems.
- (4) understand the concept of improper integrals, and methods of evaluation.
- (5) apply integration in applications such as including area, volume and average value of a function.
- **(6)** understand the concept of infinite sequences, and the concepts of boundedness and convergence of a sequence.
- (7) apply 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; apply the analysis of alternating series.
- (8) understand the concept of power series, in particularly, the Taylor and Maclaurin series.

Text: Calculus – Concepts and Contexts, 3rd ed., by James Stewart.

Topics covered: Appendix G, Chapter 5, parts of Chapter 6, and parts of Chapter 8.

Web page: The web page for the course is at http://www.csub.edu/~clam/math202w07.html

Labs: Lab are conducted at the last hour of each class. <u>Attendance is required.</u> You are required to work in groups of 2-4 on assigned problems and hand in the lab reports **individually** at the beginning of class on Tuesdays. One lab will be graded at random from each group, and every group member will be assigned the same grade.

Homework: Homework will be given out every Thursday and is due the Thursday after.

Grading: In addition to labs 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.

Labs	10%
Homework	20%
Test 1	20%
Test 2	20%
Final Exam	30%

Test Dates:

• First Test: Feb 1, Thursday (tentative)

Second Test: March 1, Thursday (tentative)

• Final Exam: March 15, Thursday, 8-10:30pm

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.

If you are caught cheating, the policy for this class is -10% to the final grade on the first offense, -20% for the second, and -50% thereafter.