California State University, Northridge

MATH 350: Advanced Calculus I, Summer 2015

Class Number: 10650; Schedule: MTWTh 12:00–1:40pm in LO1326.

Instructor: Dr. Vladislav Panferov, office SN 131, phone (818)677-2326

Email: vladislav.panferov@csun.edu

Course webpage: www.csun.edu/~panferov/math350/

Office hours: (tentative: check webpage for updates) Mon, Tue, Thu 10-11am, or by appointment (email).

Course description: "Single-variable calculus with proofs". The goal of the course is to provide a mathematically rigorous base for the fundamental facts of the calculus of single variable. Topics include the real number system, continuous functions, differentiation, Riemann integration for functions of one real variable, and Taylor's formula

Text: M. H. Protter, C. B. Morrey, A First Course in Real Analysis, 2nd ed., Springer 1991. We plan to cover Chapters 1-5, and the one-dimensional version of Taylor's theorem (from the supplementary lecture notes).

Recommended references: J. Kirkwood, An Introduction to Analysis, Waveland Press, 2002; M. Spivak, Calculus, 4th ed., Publish or Perish, 2008 (or earlier editions); R. Courant, F. John, Introduction to Calculus and Analysis, Vol. I, Springer 1989; V. A. Zorich, Mathematical Analysis, Vol. I, Springer 2004;

Prerequisite: MATH 320

Grading: 25% quizzes, 40% two midterm tests, 35% final exam (cumulative). The percentages are generally translated into letter grades using the following scale: 90-100% A; 80-89% B, 70-79% C, 60-69% D, 0-59% F. There will be no "grading on the curve", however the cutoff numbers for the grades may be lowered, at instructor's discretion, based on the overall performance of the class.

Homework: Homework is the course's most essential component. You are expected to solve a large number of problems each week, the list of which will be announced in class or on the course webpage. Homework problems will not be graded; however, selected problems will be included in quizzes.

Tests/exams: There will be two in-class midterm exams, tentatively scheduled for June 11 (Thursday) and June 29 (Monday). This schedule may be adjusted, and the changes will be announced in class and on the course webpage. All exams will be closed books/notes.

Make-ups: There will be no make-ups for tests or quizzes, unless in truly exceptional cases, for a valid and well-documented reason. In such case arrangements for an alternate date and time should be made prior to the scheduled test date, if possible.

Final exam: On Tuesday, July 7, 2015, 12:00–1:40pm in LO 1326.

Electronic devices: Calculators, cellphones and other electronic devices are not allowed on the tests/quizzes, or the final exam.