MATH 150: CALCULUS WITH ANALYTIC GEOMETRY I

SEMESTER: SUMMER SESSION 1, 2017 INSTRUCTOR: CHRISTOPHER NATOLI

#### 1 Details

Classroom: 204 Hunter West

Class time: 5:45–7:50PM Monday through Thursday

Office hours: after class Monday and Thursday

Textbook: Essential Calculus by James Stewart, second edition, with WebAssign

Email: chrisnatoli@gmail.com (do not email me at any other address)

Website: https://chrisnatoli.github.io

### 2 Tentative lecture schedule

1. §1.3 The Limit of a Function 14. §3.2 The Mean Value Theorem and

2. §1.4 Calculating Limits §3.3 Derivatives and the Shapes of Graphs

3. §1.5 Continuity 15. §3.4 Curve Sketching

4. §1.6 Limits involving Infinity 16. §3.5 Optimization Problems

5. §2.1 Derivatives and Rates of Change 17. §3.7 Antiderivatives

6. §2.2 The Derivative as a Function 18. Exam II

7. §2.3 Basic Differentiation Formulas and

§2.4 The Product and Quotient Rules

8. §2.5 The Chain Rule
21. §4.3 Evaluating Definite Integrals
22. §4.4 The Fundamental Theorem.

9. §2.6 Implicate Differentiation

22. §4.4 The Fundamental Theorem of Calculus

10. §2.7 Related Rates 23. §4.5 The Substitution Rule

11. Exam I (June 20) 24. §7.1 Areas Between Curves

12. §2.8 Linear Approximations and Differentials
25. §7.2 Volumes
26. §7.3 Volumes by Cylindrical Shells

13. §3.1 Maximum and Minimum Values 27. Exam III

# 3 Homework policy

Problem sets will be assigned roughly twice a week, on Mondays and Wednesdays. Those assigned on a Monday will be due the following Thurday at 11:59PM, and those assigned on a Wednesday will be due the following Monday at 11:59PM. (The first homework will be assigned on Monday, June 5, and will be due Thursday, June 8.) All problem sets will be conducted through an online service called WebAssign—more details about that to come. Late homework will not be accepted, but the lowest problem set score will be dropped from your grade.

### 4 Exams

There will be three exams and one final exam. The first three exams will cover the material since the last exam, but the final exam will be cumulative. Calculators and phones are not allowed on any exams. The dates of each exam are yet to be decided.

## 5 Grading

10% problem sets, 90% exams. The final exam will be worth two of the other exams. Your lowest exam grade will be dropped; if the final is the lowest grade, it will be counted as one exam. If you miss an exam, that will count as your lowest grade, so it will be dropped.