

MATH 150: CALCULUS WITH ANALYTIC GEOMETRY I
SEMESTER: FALL 2017
INSTRUCTOR: CHRISTOPHER NATOLI

1 Details

Classroom: 507 Hunter West
Class time: Monday and Wednesday, 3:10–5:00PM
Office hours: Wednesday, 2:10–3:10PM in 924 Hunter East
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

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| 1. §1.3 The Limit of a Function | 16. §3.3 Derivatives and the Shapes of Graphs |
| 2. §1.4 Calculating Limits | 17. §3.4 Curve Sketching |
| 3. §1.5 Continuity | 18. §3.5 Optimization Problems |
| 4. §1.6 Limits involving Infinity | 19. §3.7 Antiderivatives |
| 5. §2.1 Derivatives and Rates of Change | 20. Exam II |
| 6. §2.2 The Derivative as a Function | 21. §4.1 Areas and Distances |
| 7. §2.3 Basic Differentiation Formulas | 22. §4.2 The Definite Integral |
| 8. §2.4 The Product and Quotient Rules | 23. §4.3 Evaluating Definite Integrals |
| 9. §2.5 The Chain Rule | 24. §4.4 The Fundamental Theorem of Calculus |
| 10. §2.6 Implicit Differentiation | 25. §4.5 The Substitution Rule |
| 11. §2.7 Related Rates | 26. §7.1 Areas Between Curves |
| 12. Exam I | 27. §7.2 Volumes |
| 13. §2.8 Linear Approximations and Differentials | 28. §7.3 Volumes by Cylindrical Shells |
| 14. §3.1 Maximum and Minimum Values | 29. Exam III |
| 15. §3.2 The Mean Value Theorem and | |

3 Homework policy

Problem sets will be assigned weekly on Wednesdays and due the following Wednesday at 11:59PM. All problem sets will be conducted through an online service called WebAssign, which you purchase with the textbook. The key for this class is “hunter 3042 6934”. 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. The final exam will be department-wide.

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.