

# **MAT 171, Accelerated single variable calculus**

## **Fall 2013**

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Time and place: lectures MW10:00-11:20, Frey Hall 112

TA Harrison Pugh

The Midterm is in class at Oct 23rd.

We will follow the text 'Calculus' by Jon Rogowski published by W.H. Freeman and Co. and cover Chapters 0-11.

This is a Calculus course for people who have had some single variable calculus, but who are not quite ready for the next level of courses (linear algebra, differential equations, calculus of several variables). We will review the early chapters on limits, differentiation and integration very quickly and then slow down a bit to cover the chapters on exponentials, applications, differential equations and infinite series. Thus the course is a mixture of reviewing things that I expect you to know already and an introduction to other topics that you will study more carefully in later courses. Expect to move quickly and do lots of difficult problems.

Homework problems will be assigned from the text and will be handed in at the recitation sections. The recitation instructor will grade and return the homework

and go over the solutions as necessary. Unless otherwise stated, homework will be due at the Tuesday recitation of each week, starting in Week 2.

There will be an in-class midterm at a date to be announced. The final will count 40% of your grade and the midterm and homeworks will count 30% each.

Weekly Homework assignments:

Week 2, Sept. 9 Chapter 2 Homework: 2.4.6, 2.4.81, 2.4.82, 2.5.36, 2.5.54,

Week 3, Sept. 16 Chapter 2 Homework: 2.6. 6, 2.6..8, 2.6. 12, 2.6. 16, 2.6. 18, 2.6. 34, 2.6. 40

2.8.10, 2.8.32,

week 4, Sept. 23, Chapter 3 Homework, 3.5.48, 3.5.50, 3.6.42, 3.6.50, 3.r.18, 3.r.38, 3.r.38, 3.r.58, 3.r.84, 3.r.86, 3.r.88

Week 5, Sept. 30, Chapter 4 Homework, 4.6.13, 4.6.32, 4.7.7, 4.7.24, 4.r.4, 4.r.15, 4.r.21, 4.r.32, 4.r.63, 4.r.69

week 6, Oct. 7th, Chapter 5 Homework: 5.3.5,5.3.12, 5.3.45, 5.4.23, 5.4.24, 5.4.37, 5.4.53, 5.6.65, 5.6.69, 5.6.82,

Week 7, Oct 14, Chapter 6 Homework: 6.1.11, 6.1.22, 6.2.19, 6.3.23, 6.3.49, 6.4.33, 6.4.48, 6.5.18, 6.5.26

Week 9, Oct 28

Chapter 7 Homework: 7.5.6, 7.5.27, 7.6.8, 7.6.12, 7.7.6, 7.7.36, 7.7.50, 7.7.63, 7.8.66, 7.9.54

Week 10, Nov. 4th

Chapter 8

Homework: 8.1.8, 8.1.17, 8.1.26,8.1.41 , 8.2.12, 8.2.36,8.2.76, 8.3.7, 8.4.28, 8.4.66

Week 11, Nov. 11th

Continue Chapter 8

Homework: 8.4.13, 8.4.21, 8.4.26, 8.5.13, 8.5.22, 8.5.42, 8.5.67, 8.6.12, 8.6.28, 8.6.80, 9.1.17, 9.1.48

Week 12, Nov 18th

Continue Chapt 9

Homework: 9.2.4, 9.3.28, 9.3.37, 9.4.20, 9.4.24, 9.4.31, 9.4.43, 9.4.46, 10.1.12, 10.1.22, 10.1.45, 10.1.58

Week 13, Nov 25

Chapter 10.2-10.4

Homework: 10.2.12 10.3.4, 10.3.5, 10.4.6, 10.4.14, 10.4.28,