### MATH 112z: Calculus II, Fall 2019 Tentative Course Calendar

(updated November 4, 2019)

## • Week 1

08/28, W: Sec 1.4 and 1.5: inverse, logarithmic, exponential functions

## • Week 2

09/02, M: Holiday, no class. 09/04, W: Sec 7.1: integration by parts

## • Week 3

09/09, M Sec 7.2: trig integrals 09/11, W Sec 7.3: trig substitution

#### • Week 4

09/16, M Sec 7.4: partial fraction 09/18, W Sec 7.7: approximate integration

### • Week 5

09/23, M Sec 7.8: improper integral 09/25, W Sec 8.1: arc length; Sec 8.2: surface area.

### • Week 6

09/30, M Sec 9.1: Modeling with differential equations; Sec 9.2: Direction field 10/02, W Midterm 1: covers topics from Week 1 to Week 5.

### • Week 7

10/07, M Sec 9.2: Euler method; Sec 9.3 Separable equations 10/09, W Sec 9.4: Population growth; Sec 9.5: linear equation.

#### • Week 8

10/14, M Fall break, no class 10/16, W Sec 11.1: sequences.

## • Week 9

10/21, M Sec 11.2: series. 10/23, W Sec 11.3: integral test

## • Week 10

10/28, M Sec 11.4: comparison test. 10/30, W Sec 11.5: alternating series.

#### • Week 11

11/04, M Midterm 2: covers topics in Section 9.1-9.5, 11.1-11.4 11/06, W Sec 11.6: absolute convergence; ratio and root test

#### • Week 12

11/11, M Sec 11.7: practice, Sec 11.8: power series 11/13, W Sec 11.9: functions defined by power functions

## • Week 13

 $11/18,\,{\rm M}\,$  Sec 11.10: Taylor series, Maclaurin Series.  $11/20,\,{\rm W}\,$  Sec 11.11: Applications of Taylor series.

## • Week 14

 $11/25,\,\mathrm{M}\,$  Sec 10.1 and 10.2: parametric equations.  $11/27,\,\mathrm{W}\,$  Holiday, no class

# • Week 15

 $12/02,\,{\rm M}$  Midterm 3: covers topics in Section 11.5-11.11.  $12/04,\,{\rm W}$  Sec 10.3: polar coordinates

• Week 16

 $12/9,\,\mathrm{M}\,$  Sec 10.4 and final review