

# Schedule

A week-by-week breakdown of the material.

## Week 1 (01/09-01/13)

**Day 1** Review of Calc 1<sup>1</sup>

**Day 2** Review of Calc 1 (cont)<sup>2</sup>

**Day 3** Area between graphs (6.1)<sup>3</sup>

## Week 2 (01/16-01/20)

**Day 1** Volumes and Mean Value Theorem for integrals (6.2)<sup>4</sup>

**Day 2** Volumes of revolution (6.3)<sup>5</sup>

Homework 1 Due: 6.1 14, 20, 26, 34

**Day 3** Shell method (6.4)<sup>6</sup>

## Week 3 (01/23-01/27)

**Day 1** The exponential function (7.1)<sup>7</sup>

Homework 2 Due: 6.2 10, 56, 6.3 24, 40

**Day 2** The exponential function (cont) (7.1)<sup>8</sup>

Homework 3 Due: 6.4 8, 40, 44, 46

**Day 3** Inverse functions (7.2)<sup>9</sup>

## Week 4 (01/30-02/03)

**Day 1** Inverse functions (cont) (7.2)<sup>10</sup>

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<sup>1</sup>[notes/calc1\\_review.html](#)

<sup>2</sup>[notes/calc1\\_review.html](#)

<sup>3</sup>[notes/area\\_graphs.html](#)

<sup>4</sup>[notes/volumes.html](#)

<sup>5</sup>[notes/volumes\\_revolution.html](#)

<sup>6</sup>[notes/volumes\\_shell.html](#)

<sup>7</sup>[notes/exponential.html](#)

<sup>8</sup>[notes/exponential.html](#)

<sup>9</sup>[notes/inverse\\_functions.html](#)

<sup>10</sup>[notes/inverse\\_functions.html](#)

## **Day 2** Logarithms (7.3)<sup>11</sup>

Homework 4 Due: 7.1 26, 48, 7.2 4, 40

## **Day 3** Logarithms (cont) (7.3)<sup>12</sup>

Homework 5 Due: 7.3 22, 34, 54, 98

## **Week 5 (02/06-02/10)**

### **Day 1** **MIDTERM 1** (study guide<sup>13</sup>)

### **Day 2** Sick day

### **Day 3** Exponential Growth and Decay (7.4)<sup>14</sup>

Compound Interest (7.5)<sup>15</sup>

## **Week 6 (02/13-02/17)**

### **Day 1** L'Hospital's Rule (7.7)<sup>16</sup>

Comparative growth of functions (7.7)<sup>17</sup>

### **Day 2** Comparative growth of functions (7.7)<sup>18</sup>

Homework 6 Due: 7.4 14, 24, 7.5 6, 8

### **Day 3** Inverse Trigonometric Functions (7.8)<sup>19</sup>

Homework 7 Due: 7.7 26, 46, 56, 58

## **Week 7 (02/20-02/24)**

### **Day 1** Hyperbolic Functions (7.9)<sup>20</sup>

Integration by parts (8.1)<sup>21</sup>

### **Day 2** Integration by parts (8.1 cont)<sup>22</sup>

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<sup>11</sup>[notes/logarithms.html](#)

<sup>12</sup>[notes/logarithms.html](#)

<sup>13</sup>[notes/midterm1\\_study\\_guide.html](#)

<sup>14</sup>[notes/exponential\\_growth.html](#)

<sup>15</sup>[notes/compound\\_interest.html](#)

<sup>16</sup>[notes/lhopital.html](#)

<sup>17</sup>[notes/growth.html](#)

<sup>18</sup>[notes/growth.html](#)

<sup>19</sup>[notes/inverse\\_trig.html](#)

<sup>20</sup>[notes/hyperbolic.html](#)

<sup>21</sup>[notes/integration\\_parts.html](#)

<sup>22</sup>[notes/integration\\_parts.html](#)

**Day 3** Integration by parts (8.1 cont)<sup>23</sup>

Homework 8 Due: 7.8 22, 38, 60, 7.9 8, 44

**Week 8 (02/27-03/03)**

**Day 1** BREAK

**Day 2** BREAK

**Day 3** BREAK

**Week 9 (03/06-03/10)**

**Day 1** Trigonometric Integrals (8.2)<sup>24</sup>

**Day 2** (at conference)

**Day 3** (at conference)

**Week 10 (03/13-03/17)**

**Day 1** Trigonometric Substitution (8.3)<sup>25</sup>

Homework 9 Due: 8.1 10, 14, 36, 38, 52

**Day 2** Method of Partial Fractions (8.5)<sup>26</sup>

**Day 3** Method of Partial Fractions (8.5)<sup>27</sup>

Homework 10 Due: 8.2 14, 16, 8.3 6, 8

**Week 11 (03/20-03/24)**

**Day 1** **MIDTERM** (study guide<sup>28</sup>)

**Day 2** Method of Partial Fractions (8.5)<sup>29</sup>

**Day 3** Improper Integrals (8.6)<sup>30</sup>

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<sup>23</sup>[notes/integration\\_parts.html](#)

<sup>24</sup>[notes/integrals\\_trig.html](#)

<sup>25</sup>[notes/integrals\\_trig\\_subst.html](#)

<sup>26</sup>[notes/integrals\\_partial.html](#)

<sup>27</sup>[notes/integrals\\_partial.html](#)

<sup>28</sup>[notes/midterm2\\_study\\_guide.html](#)

<sup>29</sup>[notes/integrals\\_partial.html](#)

<sup>30</sup>[notes/integrals\\_improper.html](#)

## Week 12 (03/27-03/31)

**Day 1** Improper Integrals (8.6)<sup>31</sup>

**Day 2** Numerical Integration (8.8)<sup>32</sup>

**Day 3** Taylor Polynomials (9.4)<sup>33</sup>

## Week 13 (04/03-04/07)

**Day 1** Taylor Polynomials (9.4). Taylor's Theorem<sup>34</sup>

**Day 2** Arc Length (9.1)<sup>35</sup>

**Day 3** Parametric Equations (12.1)<sup>36</sup>

## Week 14 (04/10-04/14)

**Day 1** Arc Length and Area (12.2)

**Day 2** Conic sections (12.5)

**Day 3** Review

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<sup>31</sup>[notes/integrals\\_improper.html](#)

<sup>32</sup>[notes/integrals\\_numerical.html](#)

<sup>33</sup>[notes/taylor.html](#)

<sup>34</sup>[notes/taylor.html](#)

<sup>35</sup>[notes/arc\\_length.html](#)

<sup>36</sup>[notes/parametric.html](#)