**Modern Models of Motion**

**Calculus Workshop Problems**

**Week 1**:

Tuesday Workshop: (Review from Calc I and II)

Mathematical Modeling: Section 1.2: 15, 17

Calculating derivatives: Chapter 3 Review Exercises (pp 248-249): 1, 3, 6, 15, 18

Antiderivatives: Section 4.8: 4, 17, 37

Calculating integrals: Chapter 5 Review Exercises (p. 425): 11, 13, 16, 17, 22

Thursday Workshop:

7.1: 1, 2, 3, 5, 6, 7, 9, 11, 13, 14

**Week 2:**

Tuesday: 7.2: 1, 2, 4, 6, 7, 10, 13, 21, 27, 28

Thursday: 7.3: 1, 2, 5, 7, 12, 15, 22, 29, 39, 42, 46, 49

**Week 3:**

Tuesday: 7.4: 1, 3, 5, 10, 13, 14, 19, 22

5.7: 21, 23, 25

Thursday: 7.5: 1, 3, 5, 8, 9, 17

5.7: 11, 17, 18

**Week 4:**

Tuesday: 7.6: 2, 4, 5, 6, 7, 8, 10, and Admirals problem part 2 (in-class handout)

Thursday: Hughes-Hallett (handout): 11.10: 2, 6, 16, 17, 18

11.11: 1, 2, 11, 14, 23, 25, 44

**Week 5:**

Tuesday: Midterm Exam

Thursday: 8.1: 1, 3, 5, 9, 12, 25, 28, 31, 43, 49, 51, 56

**Week 6:**

Tuesday: 8.2: 1, 5, 9, 11, 16, 21, 25, 30, 31, 47, 59, 61

Thursday: 8.3: 2, 3, 5, 7, 10, 13, 16, 20, 29, 42

**Week 7:**

Tuesday: 8.4: 1, 2, 7, 10, 12, 13, 15, 21, 24, 25, 29, 38

Thursday: 8.5: 4, 7, 10, 13, 15, 19, 22, 25, 26, 33, 35

**Week 8:**

Tuesday: 8.6: 1, 3, 5, 7, 11, 17, 23, 28, 38

Thursday: 8.7: 3, 4, 5, 7, 13, 16, 19, 23, 26, 42, 45, 61

**Week 9:**

Tuesday: 8.8: Example 3, and 8.8: 27, 29, 31

Thursday: Final Exam