

# CALENDAR OF TOPICS

## FALL 2021

| MONDAY                                                                   | WEDNESDAY                                                                | FRIDAY                                                                   |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| CALENDAR SUBJECT TO CHANGE.                                              | 8/25 Ch. 2.1 -2.4<br>Units and Kinematics                                | 8/27 151 Review, TM5 Ch. 2.1 -2.4<br>$a = a_0$ : Projectiles & Circles   |
| 8/30 151 Review, TM5 Ch. 2.4<br>Linear Dynamics                          | 9/1 151 Review, TM5 Ch. 2.4<br>Linear Dynamics                           | 9/3 151 Review, TM5 Ch. 2.4<br>Linear Dynamics                           |
| 9/6 151 Review, TM5 Ch. 2.4<br>Rotational Dynamics                       | 9/8 151 Review, TM5 Ch. 2.4<br>Rotational Dynamics                       | 9/10 151 Review, TM5 Ch. 2.4<br>Rotational Dynamics                      |
| 9/13 151 Review, TM5 Ch. 2.4<br>Static Equilibrium                       | 9/15 151 Review, TM5 Ch. 2.4<br>$F = F(v)$ : Drag                        | 9/17 TM5 Ch. 2.5<br>Conservation Laws                                    |
| 9/20 TM5 Ch. 2.5<br>Conservation Laws                                    | 9/22 Equinox: 3:21 pm EDT TM5 Ch. 2.5<br>Equilibrium & Stability         | 9/24<br>No Class                                                         |
| 9/27 151 Review & TM5 Ch. 2<br>Catch-up & Review                         | 9/29<br>Exam 1 (IC + TH)                                                 | 10/1 TM5 Ch. 3.1-3.2<br>Simple Harmonic Motion                           |
| 10/4 TM5 Ch. 3.5<br>Damped Oscillations:<br>Underdamped Motion           | 10/6 TM5 Ch. 3.5<br>Damped Oscillations:<br>Underdamped Motion           | 10/8 TM5 Ch. 3.5<br>Damped Oscillations:<br>Critical & Overdamped Motion |
| 10/11 TM5 Ch. 3.5<br>Driven Harmonic Oscillations                        | 10/13 TM5 Ch. 3.5<br>Driven Harmonic Oscillations                        | 10/15<br>Fall Break                                                      |
| 10/18 TM5 Ch. 3.6<br>Resonance                                           | 10/20 TM5 Ch. 3.7<br>Electrical Oscillations                             | 10/22 TM5 Ch. 4.4<br>The Plane Pendulum                                  |
| 10/25 TM4 Ch. 3 & 4<br>Catch-up & Review                                 | 10/27 TM5 Ch. 6.1-2<br>The Calculus of Variations                        | 10/29 TM5 Ch. 6.3<br>The Brachistochrone                                 |
| 11/1 TM5 Ch. 3 & 4<br>Exam 2                                             | 11/3 TM5 Ch. 6.4-6<br>The Geodesic & Constraints                         | 11/5 TM5 Ch. 6.7.1-2<br>Hamilton's Principle                             |
| 11/8 TM5 Ch. 7.1-2<br>Lagrange's Equations in<br>Generalized Coordinates | 11/10 TM5 7.3-4<br>Lagrange's Equations with<br>Undetermined Multipliers | 11/12 TM5 7.3-4<br>Hamilton's Equations                                  |
| 11/15 TM5 Ch. 7.10<br>Hamilton's Equations                               | 11/17 TM5 Ch. 7.10, 9.11<br>Rocket Science                               | 11/19 TM5 Ch. 9.11<br>Rocket Science                                     |
| 11/22<br>←                                                               | 11/24<br>THANKSGIVING BREAK                                              | 11/26<br>→                                                               |
| 11/29 TM5 Ch. 10.1-3<br>Orbital Transfers                                | 12/1 TM5 Ch. 10.1-3<br>Motion Relative to Earth                          | 12/3 TM5 Ch. 10.4<br>Motion Relative to Earth                            |
| 12/6 TM5 Ch. 10.4<br>Motion Relative to the Earth                        | 12/8<br>Review                                                           | <i>Reading Day</i>                                                       |

**FINAL EXAM:**  
**TUESDAY, DECEMBER 14, 8:30 AM**