## EN PH 131 – Winter 2023 Tentative Lecture Schedule

|    | Week<br>ending<br>Friday        | Content  | Sections in<br>Texts<br>H: Hibbeler<br>(14°) | Practice Problems<br>Posted on eClass<br>Suggested due date:<br>Friday of the week |
|----|---------------------------------|--|--|--|
| 1  | Jan 6<br>(First class<br>Jan 6) | Introduction (to course, syllabus,<br>eClass, etc.). Review units,<br>dimensional analysis, and calculus                     | 12.1   | Problem Set 1  |
| 2  | Jan 13                          | Rectilinear kinematics, Curvilinear kinematics   | 12.2-12.5                                    | Problem Set 2  |
| 3  | Jan 20                          | Projectile motion. Planar motion of<br>particles: Normal and Tangential<br>coordinates                                       | 12.6-12.7                                    | Problem Set 3  |
| 4  | Jan 27                          | Relative motion/constrained motion of particles  | 12.9, 12.10                                  | Problem Set 4  |
| 5  | Feb 3                           | Force and acceleration: rectangular coordinates  | 13.1-13.4                                    | Problem Set 5  |
| 6  | Feb 10                          | Force and acceleration: Normal and<br>Tangential coordinates. Midterm<br>review<br>Midterm Sat. Feb 11, 2022,<br>2:00-3:30pm | 13.4-13.5                                    | Problem Set 6  |
| 7  | Feb 17                          | Principle of work and energy   | 14.1-14.4                                    | Problem Set 7  |
| 8  | Feb 24                          | Reading week   |  |  |
| 9  | Mar 3                           | Potential energy and conservation of energy  | 14.5-14.6                                    | Problem Set 8  |
| 10 | Mar 10                          | Principle of impulse and momentum  | 15.1 - 15.3                                  | Problem Set 9  |
| 11 | Mar 17                          | Conservation of momentum and impact  | 15.3-15.4                                    | Problem Set 10   |
| 12 | Mar 24                          | Kinematics and kinetics of rigid bodies  | 16, 17<br>Lecture<br>notes                   | Problem Set 11   |
| 13 | Mar 31                          | Work and energy of rigid bodies  | 18<br>Lecture<br>notes                       | Problem Set 12   |
| 14 | Apr 7<br>(Last class<br>Apr 5)  | Impulse and momentum of rigid bodies   | 19<br>Lecture<br>notes                       | Problem Set 13   |
|    |                                 | Final Exam Tuesday Apr 15, 2022,<br>9:00-11:30am (tentative)   |  |  |