PHYSICS 310 - FALL 2015
(MWF: 8.00 am to 8.50 am Rm Neckers 410)

Instructor: Thushari Jayasekera
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Office Hours: W 9.00-12.00 pm and F 1.00 pm – 4.00 pm
Textbook: Classical Dynamics – John Taylor
Supplementary Textbook: Classical Dynamics of Particles and Systems- Thornton and Marion (5th Edition)

Course Content:

Chapter 1: Newton’s Laws of Motion
Chapter 2: Projectiles and Charged Particles
Chapter 3: Momentum and Angular Momentum
Chapter 4: Energy
Chapter 5: Oscillations
Chapter 6: Calculus of Variations
Chapter 7: Lagrange’s Equations
Chapter 13: Hamiltonian Mechanics
Chapter 8: Two-Body Central Force Problem
Chapter 9: Non-Linear Frames
Chapter 10: Rotational Motion and Rigid Bodies
Chapter 11: Coupled Oscillators and Normal Modes

Homework: Homework will be assigned from each chapter. Homework will be graded with a careful attention, and the solutions will be provided with the graded homework.

Exams:

Exam 1: Chapters 1, 2, 3, 4, 5
Exam 2: Chapter 6, 7
Exam 3: Chapter 8, 13
Final Exam: Comprehensive
Grading:
Homework & Quizzes =20%
Exam 1 = 20 %
Exam 2 = 20 %
Exam 3= 20%
Final Exam = 20%
Total = 100%

Final Grade:
A 90% -100%
B 75 % - 89 %
C 60%- 74%
D 50 % - 59 %
F Less Than 50%

Tentative Calendar Plan and the University Policies are attached