

**Shepherd University**  
**PHYS 299 ST: CLASSICAL MECHANICS**

**Instructor:** D. L. Henry, Byrd Science Center 216, 876-5231, dhenry@shepherd.edu

**Text::** *Classical Mechanics* by John R. Taylor (University Science Books, 2005)

This course is offered as an individualized study course; the student will work independently. There will be one one-hour period each week during which the student and instructor will meet to review questions and discuss problems the student may be having. The instructor will be available via email and by appointment during other times. Problems will be assigned. Tests will be given periodically as announced by the instructor; generally there will be one test for each chapter of the text in the syllabus. Tests may be written or oral (or both). The final exam will be comprehensive and will consist of both a written and an oral part.

**From the Shepherd College Student Handbook:** *"The principles of truth and honesty are recognized as fundamental to life at Shepherd. The College expects both faculty and students to honor these principles. This means all academic work will be done by the students to whom it is assigned, without unauthorized aid of any kind."*

**Schedule:** This schedule is tentative and may be changed as the semester progresses. The actual schedule will depend in part on the interests of the student (and instructor!) and his or her progress.

Chapter	Topic
1	Newton's Laws of Motion
2	Projectiles and Charged Particles
3	Momentum and Angular Momentum
4	Energy
5	Oscillations
7	Lagrange's Equations
8	Two-Body Central-Force Problems
9	Mechanics in Noninertial Frames