

Handouts: 1) Syllabus

2) Intro Survey - return by Thursday

3) Math Diagnostic Test - take on own

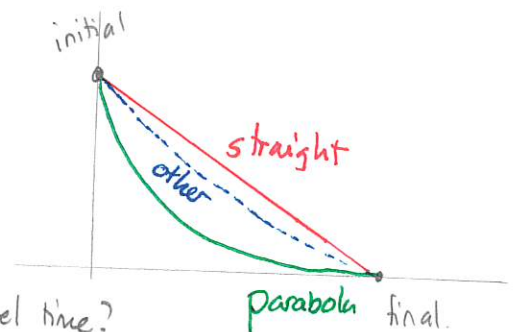
- return to class on Wednesday.

- does not count for grade but does reflect typical math background needed.

4) Roster - records attendance

- miss all classes first week \Rightarrow dropped.Labs - no labs this week.Physics questionDemo: Brachistochrone device

Consider an object that can slide along various ramps between the same initial + final locations only under influence of Earth's gravity. What shape should the ramp have to provide the shortest travel time?



- Exercise:
- * Introduce yourself to neighbor
 - * Decide your choice of curve.
 - * Describe why you chose your choice? What reasoning/evidence supports your choice?
 - * Evaluate your neighbor's answer + reasoning

This is an example of a question that physics can answer. In this case it considers an object moving under known forces and the type of physics that addresses this is Newtonian/classical physics. Phys 111 will introduce you to this

Demo Actual Brachistochrone.

Phys III will introduce you to basic ideas, concepts and techniques from classical physics: You will learn:

- 1) how to describe and understand motion using technical physics concepts
- 2) concepts and techniques associated with thermal physics
- 3) how to use mathematics to "tell a story" about physical situations.

The mathematics includes: algebra, trigonometry, basic geometry.

- 4) how to use a system of deductive reasoning that starts with a small number of ideas and extrapolates from these to describe a wide range of phenomena (This is extremely useful in many areas).

Slide 1

Course details (for the moment)

- 1) Syllabus - contact info
- my email
- 2) Website - course
- materials page.
- 3) D2L page - more details Wednesday.
- 4) Exam dates - ~~no~~ conflicts known now - discuss with me
- limited make-ups → require documentation
- no early/late travel...

General level of course

- * no physics background assumed.
- * intro level - phys 131 more sophisticated
"basic"

Next Two Days

- 1) Wednesday - lecture
- show course website. for reading

~~Warm up~~ - reading quiz
- D2L
- 2pts

- 2) Thursday - discussion / quiz
- do problems before class
 III Ex 1, 2, 3, 4, 5, 6, 8, 9

- bring to class
- will discuss in groups
- 10 minute quiz at end of class 5pts (big total 600pts)

DIAGNOSTIC TEST