PHYSICS 241 – Computational Mechanics – Fall 2013

Location: Class - Workman 109, Lab - Speare 116

Class: M-W 1:00pm-1:50pm  Lab: W 2:00-4:00 pm  Office Hours: Monday 3:00-5:00 pm

Professor: Richard Sonnenfeld, Workman 347,
Tel: 575-838-7113, rsonnenfeld@gmail.com

Goals: Every course graduate should be comfortable with
1) Solving classical mechanics problems at a level comparable to
standard “college physics” texts.
2) Writing short programs in MATLAB to solve physics problems.

Programming Lab: The programming lab is an opportunity for you to work on your computational
homework and get assistance. Attendance is required.

Schedule/Topics: A syllabus and exam schedule will be posted on the web.

Announcements: Announcements are made in class and (sometimes) posted on the web.

Required Texts: Computational Mechanics by R. Sonnenfeld (this book may be purchased
for $25 and will be posted in electronic form)

Optional Texts: Getting Started with MATLAB: an Introduction for Scientists and Engineers
by Rudra Pratap
Oxford University Press
ALSO
You should own a “freshman physics” book. (Halliday and Resnick, Young and
Freedman are both good choices) Buy one used cheap!

is the source of all assignments and other course information.

Grading: Test 1: 20% (Programming)
Test 2: 20% (Mechanics, Dynamics)
Project: 30%
Homework: 30%

“A” is 90-100, “B” is 80-90 … etc. (I reserve the right to curve the grades later in the
course, but only in your favor.)

Homework: Written homework is usually assigned Monday and collected at beginning of class the
following Monday. Programming homework XX is due before midnight on
Wednesdays and is to be uploaded to yourid@babelfish.nmt.edu:~/phys241/hwXX. Late
homework is strongly discouraged and may not be accepted.

Programming (MATLAB) homework should be done individually. Working with and
talking to classmates is encouraged, but you need still to write your own code. If I
receive very similar programs, no credit will be given to anyone for the work. Code
needs to work when I run it.