Physics 151 Summer 2017 "Physics Immersion" Professor James L. Thomas Email: <u>jthomas@unm.edu</u>

This is a physics immersion class. We will meet 2.5 hours every day. 9-10:30, half hour break, and then 11-12. Some of us (self included) may work through the break, possibly stepping out briefly to grab a coffee and then back to the "grind". (The good news: the class ends at the end of June, so we can all play the rest of the summer!)

Text: College Physics by Knight, Jones, & Field. 3rd Edition, ISBN 978-0-414332-3 We will also use the "Mastering Physics" online homework system. You can save some money by purchasing the eBook, instead of the hard copy.

Mastering Physics. You need to log on to "Mastering Physics" (MP) <u>http://www.pearsonmylabandmastering.com/northamerica/masteringphysics/students/get-registered/</u> The course ID is MPTHOMAS151.

You should register in MP and do the "Introduction to Mastering Physics" assignment BEFORE our first meeting.

Homework must be done on time. You lose 2% per hour that a homework assignment is late.

iClickers. Each class period will **begin** with iClicker questions from the assigned reading and lecture. Using iClickers will let me know (a) if you did the assigned reading & watching and (b) if there are areas of confusion that need further discussion. Please bring your iClicker to every class.

Class Activities. This class is mostly "inverted." You will begin each chapter by reading it, and by watching some lectures on it, available on Mastering Physics in the "Study Area." Each class will begin with clicker questions (15-20 min). Then we will do conceptual worksheets, which take about an hour to do *if you keep moving!* We will "grade" the worksheets (10 minutes), and then begin the Mastering Physics homework. **If you have a laptop computer that you will use for MP, please bring it to class.**

The MP homework is due at midnight. You probably will have to finish it after class. Do not google the answers.* Then read the next chapter and watch the videos to prepare for the next class.

In general, every hour of class time will require an hour of study outside of class. You can expect to put in an additional 2.5 hours of time every weekday.

Grades. I *expect* everyone to earn an A. That's because I expect everyone to work hard (for four weeks only!) I expect everyone to work hard because I expect you want to learn the material, so that you do well on the MCAT.

There will be an hour exam every week on what we cover (usually four chapters.) Each exam is 20% of your grade; Mastering Physics, Clickers, & Worksheets make up the remaining 20%. **Class attendance is mandatory.**

*You don't believe this, but it is true: you **cannot** learn to do physics problems by reading solutions to physics problems. They always seem to make sense when you read through them, but then, if the slightest thing gets changed, you can't handle it. You think you "understand" it, but you don't. So googling answers is simply wasting your time. Homework doesn't count *that* much. You are better off struggling to solve the problems, working in teams, asking for help the next day, etc. than googling. (By the way, **I** cannot and did not learn to solve physics problems by reading solutions to physics problems. I am just like you, i.e. human.)