Master Physics Teacher Certificate

Modern Physics

Text: Ideas of Modern Physics by Simon Dalley — Summer 2018

Objectives: Upon successful completion of this course, students will be able to:

* Explain how the main ideas of Modern Physics shape our world
* Analyze and interpret quantitative data in the context of Modern Physics
* Identify Ideas of Modern Physics within the appropriate State standards

Date (1-5 pm)	Pre-class reading and quizzes		
before Jul 9	**Chapter 1 Numbers in Science prelab**		
Mon Jul 9	**Chapter 2**	**CLASSICAL PHYSICS**	**Pre-test & LAB - Measurement Error**
Tues Jul 10	**Chapter 3 .1 - 3.2**	**SPECIAL RELATIVITY**	**LAB - Light Speed**
Wed Jul 11	**Chapter 3.3 - 3.4**	**SPECIAL RELATIVITY**	**LAB - Moving Clocks**
Thu Jul 12	**Chapter 4.1 - 4.2**	**GENERAL RELATIVITY**	**LAB - Free Fall**
Fri Jul 13	**Chapter 4.3 - 4.4**	**GENERAL RELATIVITY**	**LAB - Hubble's Law**
Mon Jul 16	**Chapter 5.1 - 5.3**	**QUANTUM MECHANICS**	**LAB - Laser Diffraction**
Tues Jul 17	**Chapter 6.1 - 6.2**	**ATOMS**	**LAB - Hydrogen Spectrum**
Wed Jul 18	**Chapter 6.3 - 6.4**	**ATOMS**	**LAB - Radioactivity**
Thu Jul 19	**Chapter 7.1 - 7.2**	**SYNTHESIS**	**LAB - Particle ID**
Fri Jul 20	**Chapter 7.3 - 7.4**	**SYNTHESIS**	**Documentary - Particle Fever & Post-test**