Physics Major Checklist

Name: _____ Class Year: _____

Foundational

			Prerequisite
_____	PHYS 141	*Mechanics*	_____ Math-131 (or concurrent)
_____	PHYS 231	*Electricity & Magnetism*	_____ Math-132 (or concurrent)
_____	PHYS 232	*Optics and Modern Physics*	PHYS 141; MATH 132 (or concurrent); concurrent MATH 231 recommended

Required courses outside the department

_____	MATH 231	*Calculus III: Multivariable Calc*	MATH 132
_____	MATH 234	*Differential Equations*	MATH 132
_____	CHEM 111L	*Introductory Chemistry I* (or AP credit)	

Math / Experimental Methods

_____	PHYS 300	*Mathematical Methods of Physics*	PHYS 231 & MATH 231, concurrent MATH 234 recommended
_____	PHYS 320	*Modern Physical Measurements*	PHYS 231 & 232 *Fulfills Writing II requirement*

Three additional advanced-level courses, at least two of which must be core courses

CORE

_____	PHYS 301	*Classical Mechanics*	PHYS 231 & either MATH 231 or 234
_____	PHYS 302	*Electrodynamics*	PHYS 231 & MATH 231, concurrent MATH 234 recommended
_____	PHYS 313	*Quantum Mechanics*	PHYS 232

ELECTIVE

_____	PHYS 304	*Statistical & Thermal Physics*	PHYS 141 & MATH 132
_____	PHYS 315	*Contemporary Optics*	PHYS 231 & 232
_____	PHYS 316	*Experimental Laser Optics*	PHYS 231 & 232
_____	PHYS 317	*Relativity & Fundamental Particles*	PHYS 231 & 232

Senior project

_____ PHYS 405 Senior Exercise [½ credit]

Physics courses offered every year	Fall:	PHYS 141, 232	Spring:	PHYS 231, 300
Physics courses offered every other year	Fall:	PHYS 304, 313 PHYS 301, 315	Spring:	PHYS 302, 316 PHYS 317, 320

Study Plan Worksheet Most physics electives are offered in alternating years, so taking the foundational courses as early as early as possible will give you the most flexibility in your schedule.

	Fall	**Spring**
First-Year	PHYS 141 MATH 131	PHYS 231 MATH 132
Sophomore	PHYS 232 MATH 231	PHYS 300 MATH 234
Junior		
Senior		

Other Academic Considerations

_____ Study abroad?:

_____ Second major?:

Research

_____ Faculty research (PHYS 490):

_____ Summer research on campus:

_____ Summer REU/other research experience:

Grad School

_____ Interest in going to grad school?

Honors

Sigma Pi Sigma: Sigma Pi Sigma is the national physics honor society. To be eligible for membership, a student must have an overall GPA of at least 3.5, have completed at least four courses at Trinity towards the physics major, and have an A- average in physics courses. In addition, they must have done one of the following: participated in activities of the SPS, been a physics TA or grader, done research for credit in a physics faculty lab, or completed an additional physics course at Trinity or at another institution.

Honors in Physics at graduation: To be eligible for honors in physics at graduation a student must complete at least one additional physics course beyond the minimum required for the major, and have an average of at least a B+ in all physics courses. The additional course may be a semester of independent research (PHYS 399) or research (PHYS 490).