Physics Major – sample curriculum

	Fall Semester		Spring Semester	
Year I				
	GSW 1110	(3)	GSW 1120	(3)
	*MATH 1310 Calculus I	(5)	*MATH 2320 Calculus II	(5)
	*PHYS 2110 University Physics I	(5)	*PHYS 2120 University Physics II	(5)
	Language	(4)	Language	(4)
		17		17
Year II				
	*MATH 2350 Calculus III & Vectors	(4)	†MATH 3320 Linear Algebra	(3)
	*PHYS 3010 Modern Physics	(3)	*PHYS 3020 Thermal Physics & Optics	(3)
	*PHYS 3110 Modern Physics Lab	(1)	*PHYS 3120 Thermal/Optics Lab	(1)
	Language	(3)	Language	(3)
	†CHEM 1250	(5)	†CHEM 1270	(4)
		16	†CHEM 1280	(1)
				15
Year III				
	*PHYS 4010 Math. & Comp. Physics	(3)	*PHYS 4700 Independent Research	(1-3)
	*PHYS 4160 Classical Mechanics	(3)	*PHYS 4100 Solid State Physics	(3)
	†MATH 3370 Differential Equations	(3)	Group X 2	(6)
	*PHYS 4700 Independent Research	(1-3)	Electives	(6)
	Group X 2	(6)		
		16-18		16-18
Year IV				
	*PHYS 4180 Elect. & Magnetism I	(3)	*PHYS 4170 Quantum Mechanics	(3)
	Group X 2	(6)	Group X 2	(6)
	Electives	(6)	Electives	(6)
		15		15

NOTES:

1. If a student places below MATH 1310 (Calculus and Analytic Geometry I), the PHYS 2110/2120 (University Physics) sequence should be deferred until the second year and replaced by the CHEM sequence.

2. Courses required for the Physics Major are indicated with an asterisk (*), for a total of 35 credit hours in Physics and 14 credit hours in Mathematics. Courses that are strongly recommended are indicated with a dagger (†).

3. "Group" refers to both the Social Sciences and the Arts/Humanities requirements of the College of Arts and Sciences (4 courses in each group). If appropriately selected, these courses may also satisfy part of the University General Education requirements, including the Cultural Diversity and International Perspective requirements.

4. A minor is also required, with the choice of subject area up to the student. Electives should be used to fulfill requirements for a minor or to explore other areas of interest.

5. Electives in PHYS include:

PHYS 3210 (Recent Progress in Astronomy)
PHYS 4030 (Stellar Structure and Evolution)
PHYS 4330 (Philosophy and Physics of Space and Time)

Suggested technical electives include:

CS 1010, 2010, 2020
CHEM 2010, 3520
MATH 4340, 4410, 4610

Please consult with the Physics Advisor regarding scheduling these courses.