

**Department: Physics and Geosciences**  
**Program: BS in Physics**

Skill Set	Professional Application	Delivery of Skill Set Courses, extracurricular activities, etc. in which the skill set is introduced (I), reinforced (R), or mastered (M)
Core Skill: Communication Skills	Efficient/effective use of modern physics techniques to conduct research and present their work.	PHYS 4192 Physics Research Seminar (R)
Core Skill: Critical Thinking	Efficient/effective problem solving; use of a trigonometry- based and calculus based methods in solving real-life different physical problems.	PHYS 1301 College Physics I (I) PHYS 1302 College Physics II (I) PHYS 1303 Stars and Galaxies (I) PHYS 1304 Solar System (I) PHYS 1373 Preparatory Physics (I) PHYS 1471 Acoustical Foundations of Music (I) PHYS 2325 University Physics I (I) PHYS 2326 University Physics II (I) PHYS 3310 Mechanics I (R) PHYS 3323 Electromagnetic Field Theory (R) PHYS 3333 Thermodynamics (R) PHYS 3343 Modern Physics I (R) PHYS 4303 Math Methods for Physicists (R) PHYS 4323 Optics (R) PHYS 4343 Modern Physics II (R) PHYS 4353 Quantum Physics (R) PHYS 4360 Nuclear Physics (R) PHYS 4370 Geophysics (R) PHYS 4383 Computational Physics (R)
Core Skill: Empirical & Quantitative Skills	Efficient/effective laboratory skills, research and writing professional reports.	PHYS 1101 College Physics I Laboratory (I) PHYS 1102 College Physics II Laboratory (I) PHYS 1104 Star and Galaxies Laboratory (I) PHYS 2125 University Physics I Laboratory (I) PHYS 2126 University Physics II Laboratory (I) PHYS 2174 Physics Forensic Lab (I) PHYS 3310 Advanced Physics Laboratory (R) PHYS 4160 Nuclear Physics Laboratory (R) PHYS 4191 Physics Research Project (R)
Core Skill: Teamwork	Integrate various modern methods used for understanding different models in modern physics.	PHYS 4390 Selected Topics in Modern Physics (R)