INTERDISCIPLINARY PHYSICAL SCIENCE (IPS)

IPS*1500 Integrated Mathematics and Physics I Fall Only (LEC: 6, LAB: 4) [1.00]
This is a foundational course for students in B.Sc. mathematical and physical sciences majors. The disciplines of Mathematics and Physics are taught in an integrated fashion that demonstrates how they support and enrich one another. Atomic structure, algebra and trigonometry, forces and Newton's laws, functions and graphing, differentiation, angular momentum and energy conservation, limits, integration, kinematics, and special relativity are presented in a harmonized fashion to ensure students have an improved understanding of these fundamentals.
Pre requisite(s): 1 of 4U Physics, PHYS*1020, PHYS*1300
Restr ict ion(s): MATH*1080, MATH*1200, PHYS*1000, PHYS*1080
Department(s): Department of Physics, Department of Mathematics and Statistics
Location(s): Guelph

IPS*1510 Integrated Mathematics and Physics II Winter Only (LEC: 6, LAB: 4) [1.00]
This is the second foundational course for students in B.Sc. mathematical and physical sciences majors. The disciplines of Mathematics and Physics are taught in an integrated fashion that demonstrates how they support and enrich one another. Thermodynamics, integration, electrostatics, partial derivatives, multidimensional integrals, simple harmonic motion, Taylor's series, and spectroscopy are presented in a harmonized fashion to ensure students have an improved understanding of these fundamentals.
Pre requisite(s): IPS*1500
Restr ict ion(s): MATH*1090, MATH*1210, MATH*2080, PHYS*1010, PHYS*1070, PHYS*1130
Department(s): Department of Physics, Department of Mathematics and Statistics
Location(s): Guelph

IPS*3000 Science Communication Fall Only (LEC: 3, LAB: 3) [0.50]
This course focuses on developing the skills required to communicate science for non-specialist audiences. The principles and practices of public speaking and writing will be explored, employing a variety of media. Through multiple oral and written assignments, students will explore tailoring their message for various audience-types.
Pre requisite(s): 2.00 credits in PHYS at the 2000 level or higher
Restr ict ion(s): PHYS*4300
Department(s): Department of Physics
Location(s): Guelph