COURSE DETAIL

UCEAP Semester Units

PHYSICS FOR LIFE SCIENCES I Country Spain **Host Institution** Carlos III University of Madrid Program(s) **Madrid Summer Physics UCEAP Course Level Lower Division UCEAP Subject Area(s)** Physics **UCEAP Course Number** 16 **UCEAP Course Suffix** Α **UCEAP Official Title** PHYSICS FOR LIFE SCIENCES I **UCEAP Transcript Title** PHYSICS I **UCEAP Quarter Units** 6.00

Course Description

This course introduces general topics in physics employing a calculus-based approach. Key course topics include: vectors; 1D and 2D kinematics; forces and motion; Newton's Law; reference systems; forces in accelerated systems; work; energy; conservation of energy; momentum; collisions; rotation; toques; angular momentum; rigid body; static; gravity; fluids; oscillations; thermodynamics; temperature; heat; ideal gasses; entropy. Text: Paul A. Tipler & Gene Mosca, Physics for Scientists and Engineers, 6th Edition Assessment: lab 30%, attendance/homework 20%, exams 50%

Language(s) of Instruction

English

Host Institution Course Number

Host Institution Course Title

PHYSICS FOR LIFE SCIENCES I

Host Institution Campus

Carlos III University

Host Institution Faculty

Host Institution Degree

Host Institution Department

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