

COURSE DETAIL

NONLINEAR DYNAMICS AND CHAOS

Country

Mexico

Host Institution

National Autonomous University of Mexico

Program(s)

National Autonomous University of Mexico

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics Engineering

UCEAP Course Number

137

UCEAP Course Suffix**UCEAP Official Title**

NONLINEAR DYNAMICS AND CHAOS

UCEAP Transcript Title

NONLINEAR DYNAMICS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course offers a study of concepts, definitions, and applications of nonlinear dynamics. Topics include: dimensional systems and bifurcations; systems in two-dimensions-- analysis in phase space, limited cycles, and their bifurcations; Lorenz equations and chaos; 1-D maps and route to chaos by period doubling, renormalization; fractals and strange attractors.

Language(s) of Instruction

Spanish

Host Institution Course Number

2075

Host Institution Course Title

NONLINEAR DYNAMICS AND CHAOS

Host Institution Campus

CIUDAD UNIVERSITARIA

Host Institution Faculty

FACULTAD DE CIENCIAS

Host Institution Degree

Host Institution Department

FISICA

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