INTERDISCIPLINARY LIVELY APPLICATIONS PROJECT

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CONTENTS:

Saving a Drug Poisoning Victim

MATHEMATICS CLASSIFICATIONS:
Calculus, Differential Equations, Mathematical Modeling

DISCIPLINARY CLASSIFICATIONS:
Chemistry, Biology, and Medicine

PREREQUISITE SKILLS:
Exponential growth and decay; Euler's method or other numerical method for solving systems of differential equations

PHYSICAL CONCEPTS EXAMINED:
Kinetics of drug uptake and elimination

MATERIALS INCLUDED:
TrueBASIC programs

COMPUTING REQUIREMENTS:
Numerical differential equations solver, spreadsheet, computer algebra system, or any computer programming language

UMAP Modules: Tools for Teaching 2000, 31–46.