

A Murder Mystery Calculus Project—The Death of Dr. Derivative

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To interest students in the power and beauty of calculus, students are sometimes assigned a project with a theme. In this assignment, students enjoy working on a project involving Newton's Law of Cooling to prove their innocence in a murder case. The project shows a practical application of the law, requires expository writing, lets students use their creativity, and encourages students to practice solving differential equations with initial conditions which, in turn, require integration. The project was given to students in an Honors Calculus II course (Math 104H) at Glendale Community College and produced the following two exceptional results, including the graphic novel version “The Death of Dr. Derivative,” by Fernando Vega-Cid.



Sid Kolpas is finishing his 48th full-time year of teaching. His interests include teacher education, the use of technology in the classroom, mathematics history, mathematically-based magic tricks, and antiquarian books. He earned a BA and MS in mathematics from California State University, Northridge and an EdD in Mathematics Curriculum and Instruction from USC. He was Burbank Teacher of the year in 1990, Glendale Community College Distinguished Faculty awardee in 2004, Hayward Award Winner by the California

Community Colleges Board of Governors in 2010, and Gould Award for Teaching Excellence at Delaware County Community College in 2016.



Fernando Vega-Cid is from Buenos Aires, Argentina. He graduated as a mathematician with an option in secondary teaching from California State University Northridge in 2014. In his third year of teaching at Western High School, he has taught several different math courses, including Algebra I/II, Geometry/Geometry Honors. He was a recipient of the Noyce Scholarship funded by the National Science Foundation and has been participating in many of the Noyce Math Conferences around the country. He attended Florida Atlantic University to complete

his credentials in education. Currently, he is the Algebra II PLC leader at Western High School. Before becoming a teacher, he was a classical musician for more than three decades. In 2018, he was nominated Teacher of the Year.