

Contact: Diana Gonzalez

**FACULTY PRESENTATION AT THE UNIVERSITY OF NORTHERN IOWA:**  
**“UNI PHYSICS EDUCATION”**

**Action Requested:** Receive the presentation.

**Executive Summary:** The University of Northern Iowa Physics Department has been a STEM leader in developing innovative and research-based curricula, providing professional development for existing teachers, preparing future teachers, and coordinating outreach opportunities for high school students. For the past 10 years, professional development efforts have provided opportunities for more than 70 Iowa teachers to obtain a high school physics teaching endorsement. The National Task Force on Teacher Education in Physics will recognize these exemplary efforts in a report to all postsecondary institutions in the United States that have a physics program. The UNI Physics Department will continue to be a STEM leader in undergraduate physics education and professional development. Dr. Larry Escalada will describe UNI's leadership role.

Dr. Escalada is a professor of physics and science education at UNI. He completed his Ph.D. in Curriculum and Instruction with an emphasis in physics and science education, an MS in physics, a BS in physics, and a BS in physics teaching from Kansas State University. He came to UNI following his service as a high school physics and physical science teacher for the Topeka Public Schools in Topeka, KS.

At UNI, he teaches introductory physics and physical science courses as well as secondary science teaching methods courses. He co-teaches a course for the Iowa Teacher Intern License Pathway (ITILP) program. His research and service involve PreK-12 physical science curricula and professional development as well as facilitating outreach activities, such as the State of Iowa Physics Competition for high school students. He has co-authored National Science Foundation funded curricula that includes Physics Resources and Instructional Resources for Motivating Students (PRISMS) PLUS. He has served on the State of Iowa Department of Education High School Science Iowa Core Curriculum Committee, as a Knowles Science Teaching Foundation Teaching Fellowship Selection Interviewer, and as chair of the American Association of Physics Teachers Committee on Physics in High Schools.