

Hilary A. Kakanis

Contact Information

Hilary.Kakanis@tamuc.edu

Academic History:

Master of Science in Physics, August 2021

Texas A&M University, Commerce, Texas

Physics Teaching Emphasis

Additional courses in Education Technology, Secondary Education, and Curriculum

GPA of 4.0

Bachelor of Science in Physics, December 2011; graduated Magna Cum Laude

Middle Tennessee State University, Murfreesboro, Tennessee (26,000+ students)

Concentrations in Astronomy and Physics Education;

Minors in Secondary Education and Mathematics

GPA of 3.75; Dean's List 10 consecutive semesters

High School Diploma

Hardin County High School, May 2006;

Honor Roll, 4 years

GPA of 4.0; graduated 5th in class

Professional Experience and Skill Sets:

Full-time Teacher, August 2012 - Present

Hallsville High School, Hallsville, Texas

Experience in generating, developing, critiquing, editing, and revising curriculum to meet the needs of students; working with other teachers in a professional learning community to improve general teaching practices; mentoring new teachers in the physics field and fostering teacher candidates from local universities; classroom management

Skills: effective written and verbal communication, adapting plans and lessons on the fly to accommodate unexpected misconceptions or lack of background knowledge; appropriate and professional interpersonal relationships with students to encourage learning and understanding while keeping a safe learning environment. Google Suite master: docs, slides, sheets, sites, forms, classroom, and drive.

Club Sponsor: Astronomy, Anime, UIL Science Coach

Experience in volunteer program recruitment and creating engaging and informative after-school lessons in topics that bring students together.

Skills: budget keeping, fundraising.

Physics Team Leader

Experience in peer leadership, with emphasis in collaboration and creating a supportive working environment. Extensive work within a professional learning community setting. Experience with conflict management among peers.

Skills: Goal setting and keeping; data analysis for benchmarks and common assessments; merging and diverging different teaching methods to adapt a full array of lesson plans and practices to round out individual assessments.

Science Department Co-Chair

Experience in conflict resolution, peer organization, decision-making and active engagement with department members to better represent viewpoints to administration. Experience as department and campus representative to larger audiences.

Skills: Budget keeping, purchase orders, effective communication

Curriculum Experience

Astronomy, since 2014; advocate for new course; sole developer (with assistance from past professor Dr. Charles Higgins (MTSU), and Region VII 4th Year Science Cadre member Mr. Jeff Overbay (then of Whitehouse ISD)); only teacher of this subject on campus.

On-Level Physics since 2012; team leader since 2013, content and curriculum developer.

AP Physics I since 2020; APSI participant summer 2021, only teacher of this subject on campus.

Honors Physics since 2021, team leader since 2021; content and curriculum developer.

Integrated Physics and Chemistry team leader 2014-2019; content and curriculum developer.

Chemistry 2019, team member.

Awards, Honors, and Achievements:

Physical Science Texas Teaching Licensure; 2013 - 2024

Certificate Holder: 250+ Professional Development hours with Region VII Service Center;

Conferences of Note:

Advanced Placement Summer Institute, Physics 1, 2021;

TAMUC Physics Teacher Collaborative, 2019-;

Presenter at Region VII for Portable Planetarium training, 2019, 2021;

Presenter at Region VII for Science and Social Studies collaborative for Physics equation manipulative and portable planetarium, 2019;

McDonald University Astronomy Teacher conference, 2015;

CAST conference attendance (2014, 2019);

High School Science Redesign, Modeling Instruction: PWC/Freshman Physics 3 (60 hours of Professional Development in Content, Pedagogy & Pedagogical Content Knowledge). July 2011, from Middle Tennessee State University and Tennessee Higher Education Commission.

Middle Tennessee State University, 2006 – 2011:

First Noyce Scholar of MTSU

MTSU Freshman Physics Award Winner (2006 – 2007)

MTSU Freshman Writing Award Winner (2006 – 2007)

Winner of the Lee Bateman Munday Memorial Award for Physics Teaching

Member of the Astrophysics class instrumental in the implementation of the MTSU Observatory under direction of Dr. Eric Klumpe

Member of a University Presidential Advisory Board as a Physics Department Representative

Received Presidential Scholarship for excellent academic achievement.

Astronomy Club President (2009-2011) and Vice President, (2009):

Awarded for Excellence for Presidential Duties in Astronomy Club (2010)

Participated in, created, and facilitated Astronomy outreach with elementary schools in the Rutherford County and Hardin County school systems. Outreach topics included, but were not limited to:

Checking Your Sources (scientific references) and The Sun

A Tour of the Solar System

Solar System Jeopardy

The Night Sky, with notable Constellations (used with portable Planetarium)

Constellation sessions (Spring, Summer, Fall, Winter, Polar)

Black Holes and Comet Tails (a review game created by Hilary Kakanis)

The Life of a Star