

CHRISTY (ZUIDEMA) METZGER

University of Delaware, School of Education

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EDUCATION

UNIVERSITY OF DELAWARE

Doctoral Student, PhD in Education

Specialization: Learning Sciences

NEWARK, DE

2021-present

TOWSON UNIVERSITY

Masters of Arts in Teaching, Secondary Science

Final GPA: 4.00/4.00

Certification in Secondary Physics

TOWSON, MD

May 2007

GETTYSBURG COLLEGE

Bachelor of Arts, Major in Physics and Minor in Mathematics

Final GPA: 3.89/4.00. 3.72 GPA in Physics. Summa Cum Laude.

Physics Departmental Honors.

Senior Thesis Research with Dr. Sharon Stephenson on modeling the direct measurement of n-n scattering using the YAGUAR pulsed reactor

GETTYSBURG, PA

May 2006

TEACHING EXPERIENCE

TOWSON UNIVERSITY

Adjunct Faculty

TOWSON, MD

Winter 2014-Summer 2021

- Instructor for introductory physics courses and labs.
- Courses Taught: Physics 211: General Physics I: Non-Calculus based course and laboratory, General Physics II: Non-Calculus based course and laboratory. Physics 202 General Physics for the Health Sciences laboratory.

JOHNS HOPKINS CENTER FOR TALENTED YOUTH

Physics Teacher

CTYONLINE

Summer 2012-Winter 2020

- Online instructor for Honors Physics and AP Physics 1. Teach students from around the world AP physics and Honors Physics online.
- Collaborated on the redesign of the Honors Physics curriculum.
- Contributed to the development of labs for the AP Physics 1 curriculum.
- Collaborate with other instructors to modify and develop materials for AP Physics 1 course as needed.

WINTERS MILL HIGH SCHOOL

Physics Teacher

WESTMINSTER, MD

2008-2012

- Head of the Physics Department. Teaching 9th grade Conceptual Physics (Honors and Academic levels) and AP Physics B.
- Developed and modified curriculum to teach Conceptual Physics. Physics First model with Active Physics and Conceptual Physics texts used. Modified and developed curriculum and labs as needed and shared with other physics instructors around the county.

- Participant in Collaborative Coaching at Winters Mill High School (Fall 2010-2012). Met with other teachers from different disciplines, observing each other's classrooms and then meeting to discuss best practices.
- Selected Participant in the Carroll County STEM PLC (Fall 2010-2011).

WESTMINSTER HIGH SCHOOL

WESTMINSTER, MD

Physics Teacher

2007-2008

- Taught 9th grade Conceptual Physics (Honors and Academic levels) and 12th grade Physics.
- Developed and used individual curriculum for the 12th grade physics course.

RESEARCH EXPERIENCE

Research Assistant

FALL 2021-present

University of Delaware School of Education

Advisor: Dr. Lynsey Gibbons

Project Title: *Understanding How Elementary*

Teachers Take Up Discussion Practices to

Promote Disciplinary Learning and Equity.

Undergraduate Senior Thesis

FALL 2005-SPRING 2006

Title: *Modeling the direct measurement of*

Advisor: Dr. Sharon Stephenson

n-n scattering using the YAGUAR pulsed reactor

HONORS AND RECOGNITION

- Knowles Teaching Fellow, 2006 Cohort. A five-year fellowship for teachers providing professional support, collaboration, and professional development activities. Selection based on content knowledge, commitment to teaching and leadership.
- Presidential Scholar at Gettysburg College.
- Phi Beta Kappa
- Julius Eno Physics Prize, highest G.P.A in Physics for sophomore students
- Miller-Mara First Year Student Prize in Physics, highest G.P.A. in Physics for First Year students.
- Gettysburg College Award in Athletics 2003, 2004, and 2005, highest G.P.A. for female athletes at Gettysburg College.
- Dean's List, Dean's Commendation List.
- Alpha Lambda Delta- first year student Honor Society
- Omicron Delta Kappa Society
- Sigma Pi Sigma- Physics Honor Society

CONFERENCE PRESENTATIONS

Rulli, C. & Metzger, C (2010). Using portfolios to promote reflective practice in new teachers, Presentation at the National Science Teaching Association Spring Conference, Philadelphia, PA.

Mossgrove, J., Rostock, R., Rulli, C. & Metzger, C. (2009). A modified approach to lesson study for secondary mathematics and science teachers. Presentation at the Chicago Lesson Study Conference, Chicago, IL.

Metzger, C. & Shirey, K (2010). Managing Differentiation. Presentation at the Knowles Teacher Initiative Summer Conference.

Rulli, C. & Metzger, C (2009). Chicago Lesson Study Group Annual Conference. Presentation at the Knowles Teacher Initiative Summer Conference Poster Session.

Gipson-Nahman, J. & Metzger, C (2007). Smithsonian Energy and Motion Workshop. Presentation at the Knowles Teacher Initiative Summer Conference Poster Session.

PROFESSIONAL DEVELOPMENT

- Developed a lesson study on Sound as Wave Phenomenon with 2 other physics teachers from 2007-2011. Taught, reflected, and rewrote lesson based on assessments and data.
- Developing Teacher-Led PLCs, the Teacher Leader with Steve DeAngelis (Fall 2010 and Spring 2011)
- Shady Side Academy on Modeling in Freshmen Physics (Summer 2010)
- Differentiated Instruction Workshop with Amy Germundson of UVA (Fall 2009 and Spring 2010)
- Formative Assessment workshop at the University of Maryland, College Park with Janet Coffey and Dan Levin (October 2008 and March 2009)
- AP Physics B workshop at the University of Texas, Dallas (August 2008)
- POGIL (Process Oriented Guided Inquiry Learning) workshop with Rick Moog at Franklin and Marshall College (April 2008)
- Modeling curriculum workshop at Arizona State University (October 2007)
- Nature of Science workshop with Randy Bell at the University of Virginia (April 2007)
- Physics by Inquiry workshop with the Physics Education Group at the University of Washington (October 2006)

ADDITIONAL EXPERIENCE

Spring 2008 **Westminster High School, Westminster, MD**
Head Coach (focused on jumpers) for the Westminster High School Outdoor Track team. Develop and run practices for the triple jumpers, long jumpers, pole vaulters, and high jumpers on the track team.

August 2003- May 2006 **Gettysburg College, Gettysburg, PA**
Physics Peer Tutor, Peer Tutors of Gettysburg College. Provide individual student tutoring for any students in Physics classes.

January 2004-May 2004 **Gettysburg College, Gettysburg, PA**
Student Associate, Dr. Sharon Stephenson, Gettysburg College Physics Department. Lead class problem solving sessions, conduct tutoring sessions, provide individual tutoring in Physics.

