#### DR. FAITH YARBERRY

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#### **EDUCATION**

University of North Texas

**PhD** in Chemistry 2002

Dissertation: "Layered Double Hydroxides: Morphology, Interlayer

Anion and the Origins of Life"

University of the Ozarks

**B.S.** in Chemistry 1992

University of the Ozarks

**B.S.** in Mathematics 1992

#### TEACHING EXPERIENCE

University of Central Arkansas

Lecturer I – College Chemistry I, College Chemistry II, General Chemistry for Health Sciences, Introduction to

Organic and Biochemistry, Fundamental Chemistry, Research

2010 - Current

Developed syllabus, administered all grades, taught associated laboratories.

Visiting Assistant Professor - College Chemistry I, College Chemistry II, Physiological Chemistry I, Physiological Chemistry II, Research

Developed syllabus, administered all grades, taught associated

laboratories, 2006-2010

**Upward Bound Instructor - Chemistry** 

Developed all materials for the Upward Bound Chemistry course 2006, 2008

Stark State College of Technology

Visiting Professor –General Chemistry for Health Sciences, Fundamental Chemistry, Research

Developed syllabus, administered all grades, and taught associated laboratories.

Kent State University

Non-tenure Track Associate Professor - College Chemistry I,

2005

## Chemistry in Society, Quantitative Analysis

2004-2005

Developed syllabus, administered all grades, and taught associated laboratories.

Texas A&M at Commerce

# Adjunct Faculty -General Chemistry, Instrumental Analysis, Advanced Analytical Chemistry

2004

Developed syllabus, administered all grades, and taught associated laboratories.

University of North Texas

## **Adjunct Faculty - Quantitative Analysis**

2003

Developed syllabus, administered all grades.

#### RESEARCH EXPERIENCE

#### **Chemical Education**

2010 - Current

- Evaluated the effects of Math ACT scores on student success in CHEM 1450 and CHEM 1402 and submitted a curriculum change proposal related to the findings.
- Developed laboratories currently used in College Chemistry I and College Chemistry II.
- Developed tools to teach students the proper way to write formulas and name ionic compounds.
- Developed a tool to teach stoichiometry that is currently being used in grades 9-12 classrooms.
- Developed a variety of materials for use by teachers in 9<sup>th</sup>12<sup>th</sup> grade classrooms and gave workshops related to these
  materials as part of the "MSP-Science Lead Teacher
  Institute" during the summers of 2010 and 2011.
- Developed physical science materials for use by 5<sup>th</sup>-7<sup>th</sup> grade teachers as part of a MSP grant during the spring and summer of 2014
- Co-PI on "A Systematic and Integrated Approach to Recruiting, Preparing, and Retaining Highly Qualified Secondary Teachers of Mathematics and Science in Arkansas" will be funded over five years through the NSF's Robert Noyce Teacher Scholarship program.

#### ADDITIONAL EXPERIENCE

STEM Residential College at Arkansas Hall

Resident Master 2013 – Current

As Resident Master, I have continued the long-standing traditions of Kids Club and Science Nights started by my predecessor. Additionally I have worked to add a Research Series of seminars, assisted the staff with MapWorks, offered several types of workshops geared at student success, and participated in CANstruction (an event involving the collection of can goods, the building of a structure with those can goods, and the donation of those can goods to charity). Finally, I have written, evaluated, and revised a Continuous Improvement Plan for the assessment of the STEM Residential College Students as it pertains to their participation in Science Night.

Hughes Residential College in Hughes Hall

**Resident Master** 2011 – 2013

Established a self-sustaining study hall, assisted in the development of the Hughes Leadership Institute as a strong entity, helped in formation of a cohesive freshman class of Hughesies through the establishment of a Coffee Shoppe, helped coordinate efforts between members of the Hughes Residential College and the community (Big Brothers Big Sisters of Faulkner County, Bethlehem House, Habitat for Humanity, Relay for Life), provided assistance to faculty associates teaching in the Hughes Residential College as needed.

American Chemical Society, University of Central Arkansas Chapter

**Faculty Advisor** 

Provides demonstrations for student activities (Bear Fairs, Majors Fair, RSO Fair, Science Nights, Girl Scout events, helping STEM at Kid's Club, etc.), assists at events in an advisory capacity, helps with all financial aspects of the organization, supervises students at the National ACS spring meeting.

Department of Chemistry / Advising Center

**Adviser for Chemistry Majors** 

Residential College Liaison in the Advising Center

Provides information to students regarding coursework, etc. that can help them succeed in their endeavors.

**2011 – Current** 

**2010 – Current** 

COMMITTEES

Hiring Committees

2012- Current

Member

Assisted in the hiring of Administrative Specialist III for the

Department of Chemistry (2012), Hughes Residential College Resident Master (2013), HPaW Residential College Resident Master (2014), Assistant Director for Training and Development (2014)

Residential College Recruitment Discussion Group

Member Spring 2013

Identify reasons why students are not registering for Residential College as quickly as in past years and develop plans to improve on this issue.

Residential College Co-curricular Programming Subcommittee

Chair Spring 2013

Helped in preparing the co-curricular portion of the self-study performed by the Learning Communities in preparation for an external evaluation.

STEM Advisory Committee

Department of Chemistry Representative 2010 – Current

Helped the Resident Master upon request with the development of Kid's Club activities, etc.

Departmental Curriculum Committee

Member (Chair - 2013-2014) 2009 - Current

Helped with all aspects of curriculum in the Department of Chemistry including incorporation of the new Core requirements into the revised PCP's for the department and the revision of the Continuous Improvement Plan

Adhoc Student Research Committee

**Member 2012** 

Assisted in the development of the current method by which students can apply to do research in the Chemistry Department.

**CNSM Lecturer Advancement Committee** 

Chair 2011-2012

Developed guidelines for promotion of a Lecturer I to Lecturer II to Senior Lecturer. These guidelines are awaiting the determination of the University guidelines to verify that they are in-line with University guidelines.

**EPIC Minor Committee** 

Member 2011 - 2012

Assisted with the initial development of the minor by identifying courses that would be applicable and by determining the credit hour divisions associated with the minor.

EPIC Residential College Committee	
Member	2011 - 2012

Assisted with the development of the EPIC Residential College and the hiring of its Resident Master

## PUBLICATIONS AND POSTER PRESENTATIONS

"Enriching the K-12 science experience" Poster Presentation at the American Chemical Society National Meeting	2014
"University of Central Arkansas Student Chapter: Collaborating with Other Science Groups on Campus" Poster Presentation at the American Chemical Society National Meeting	2013
"Identification markers between ACT scores and passing rates in freshman level chemistry courses"  Poster Presentation at the American Chemical Society National Meeting	2012
"Increasing visibility on campus: Recruiting and maintaining motivated members"  Poster Presentation at the American Chemical Society National Meeting	2012
"Power of the Mole" Workshop Presentation at a ChemEd meeting	2011
"Promoting Chemistry in Arkansas"  Poster Presentation at the American Chemical Society National Meeting	2011
"Junior Jewels – CSI Diamonds"  CSI Workshop for Junior Girl Scouts of the Diamonds of Arkansas, Oklahoma, and Texas Council	2009

## **AFFILIATIONS**

American Chemical Society Alpha Chi Sigma National Society of Collegiate Scholars Daughters of the American Revolution

ARKANSAS STATE SERVICE	
Arkansas State Science Fair	2013
Arkansas State Science Fair	2012
Arkansas State Science Fair	2010
"Crime Lab Chemistry" and "Chemical Reactions"	2010
ACMSE Summer Institute	2009
Arkansas State Science Fair	2009
Arkansas State Science Fair	2008
Arkansas State Science Fair	2007
Arkansas State Science Fair	2006
LOCAL SERVICE	
Ecofest (ACS)	2013 - Current
Ecofest (ACS) Ecofest (Girl Scouts, ACS, Hughes Residential College)	2013 - Current 2012
Ecofest (Girl Scouts, ACS, Hughes Residential College)	2012
Ecofest (Girl Scouts, ACS, Hughes Residential College) Ecofest (Girl Scouts, ACS)	2012 2011
Ecofest (Girl Scouts, ACS, Hughes Residential College) Ecofest (Girl Scouts, ACS) Ecofest (Girl Scouts)	2012 2011 2010
Ecofest (Girl Scouts, ACS, Hughes Residential College) Ecofest (Girl Scouts, ACS) Ecofest (Girl Scouts) Uncovering the Evidence IPP	2012 2011 2010 2010
Ecofest (Girl Scouts, ACS, Hughes Residential College) Ecofest (Girl Scouts, ACS) Ecofest (Girl Scouts) Uncovering the Evidence IPP Ecofest (Girl Scouts)	2012 2011 2010 2010 2009
Ecofest (Girl Scouts, ACS, Hughes Residential College) Ecofest (Girl Scouts, ACS) Ecofest (Girl Scouts) Uncovering the Evidence IPP Ecofest (Girl Scouts) Girl Scout Troop 6535 Silver Award CSI Event	2012 2011 2010 2010 2009 2009
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Please ask if you would like an extensive list of research publications and service.