

**CAREER OBJECTIVE:**

I am a goal oriented individual who combined graduate school with full time employment and other commitments. In achieving this, I have shown myself to be highly motivated and determined to accomplish personal goals. During this time, I have developed time management and organizational skills which have enhanced my ability to work well under pressure. I have a wide variety of work experiences which accentuate my ability to relate to a wide range of people and circumstances.

**EDUCATION:**

2010-2014

**THE UNIVERSITY OF ALABAMA HUNTSVILLE**

MS Chemistry

3<sup>rd</sup> Year

- Methods of Chemical Analysis
- ST: Molecular Modeling
- Classroom and Behavior Management
- Applied Multiculturalism
- Teaching Science in Middle and Secondary School

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**Thesis, "A Size Limit for Protein Crystals"**

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*Thesis summary:*

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This is a theoretical thesis based on calculating the parameters of the Gibb's Free Energy on the crystal surface which contribute to the size of the crystal's radius. I looked at the equilibrium conditions in which the crystallization had terminated causing Ostwald ripening to occur. This would explain why multiple smaller crystals form rather than one large crystal. This theory has applications in the field of protein crystallography, for determining crystal structure, as well as biochemical research in drug delivering mechanisms.

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2<sup>nd</sup> Year

- Biochemistry
- Advanced Inorganic Chemistry
- Reading in the Content Area
- Computer Based Instructional Technology
- Contribution of Psychology to Education
- Exceptional Child and Youth

1st Year

- Advanced Thermodynamic
- Quantum Chemistry
- Polymer Physical Science
- Polymer Synthesis and Characteristics
- Education Leader as an Evaluator

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*Practical skills gained during my degree:*

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Most of the chemistry work I did was theoretical which gave me the experience of researching and analysing data to prove existing scientific theory. I used higher mathematics to solve real world chemical problems, e.g. quantum mechanical, thermal, and biological problems. I also gained problem solving and research skills during my thesis process.

2007-2009                      Athens State University, Athens, AL  
BS Chemistry, Summa Cum Laude

2005-2007                      Calhoun Community College  
Chemistry

### **WORK EXPERIENCE:**

2010-present                      **Sparkman High School, Science Teacher**  
I have taught chemistry, AP chemistry, multiple engineering classes, computer programming, AP computer Science Principles, and AP computer Science A. As an AP teacher I have taught college level chemistry and programming to high school students. I have been responsible for setting up the chemistry lab for all the chemistry teachers, and over the past two years I have been the mentor teacher for both of our newly hired teachers. In my engineering program I work with the students to use the engineering process to solve real world problems, and I teach a wide range of engineering areas. I use a variety of teaching methods to present difficult material to a wide range of learners. Over the past three years I have successfully written and received six grants which have financially enhanced our engineering department. I am the Cyber Patriot coach, VEX coach and have participated in the Lockheed Martin programming contest the last two years. I have attended several summer training sessions to increase content knowledge and learn new teaching strategies.

2013-present                      **University of Alabama Huntsville, Adjunct Teacher**  
I teach freshmen Chemistry 101 for the University of Alabama Huntsville during the fall semester when they have an increase in student enrolment. I am comfortable using the technologies available to the students including canvas and turning technologies. My class sizes have ranged from the minimum of 25 students to a class of 100. The topics covered in first year chemistry range from the basics of scientific notation through thermodynamics and organic chemistry. For one summer semester I taught a portion of my class as a distance education class. I have strong chemistry skills as well as diversified teaching techniques. The student review and surveys of my class are above both the college average as well as the chemistry department average.

2004-2010                        **Bed, Bath, and Beyond, Operations Manager**  
I was responsible for total store operations including shipping and receiving, accounts payable, human resources, and customer service. All of the training and scheduling was done by me, as well as maintaining accurate store inventory. It was my responsibility to balance the stores cash flow and handle internal employee relations.

### **SKILLS:**

*Teamwork*                      In all of my positions I have worked to maintain a productive work environment and have started multiple interdepartmental projects including new science fund raising projects and organizing a science department mural committee.

Teresa Hodge  
CV

- Communication*      I communicate well with colleagues, students, and parents to implement new programs and policies.
- Problem solving*      As a store manager I was able to reduce shrink from over 10 percent to an acceptable 1.2% loss. I was also able to increase store profits within my first year of management. While teaching at Sparkman I reduced the failure rate of chemistry students from over thirty percent to less than five.
- Computer skills*      I am proficient in MS Word, Excel, PowerPoint and basic web design skills. I have experience in computer programming, including C#, C++, Java and Java Script. I am also trained in molecular modelling software, Q-Chem, Spartan, Mathematica, and Maple.

**REFEREES:**

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