



Welcome to Deep Run Chemistry

My name is Jennifer Krug, and I am delighted to have you in my Chemistry class. I would like to use this opportunity to introduce myself and to explain my expectations for students this year. In 1995 I graduated from James Madison University with a BS in Chemistry.

After graduating, I worked as a quality control lab technician for Wampler-Longacre, using gas chromatography to test poultry fat for pesticides and performing atomic absorption and spectroscopy to measure the nutritional levels in the poultry feed. In 1996, I was hired by Merck pharmaceuticals to work in an "In Process" lab. This lab worked around the clock, using gas chromatography (GC), high performance liquid chromatography (HPLC), and bench techniques to test the quality of each individual step that was required to produce medicines, such as *Crixivan*, a protease inhibitor used as a component of highly active antiretroviral therapy to treat HIV/AIDS; *Lovastatin*, used for lowering cholesterol in those with hypercholesterolemia to reduce risk of cardiovascular disease; and Cefoxitin, a cephamycin antibiotic developed by Merck & Co., Inc., which acts by interfering with cell wall synthesis.

In 1998, my husband got a job in the West End of Richmond, so we moved to Short Pump. I took a short contract working for Whitehall-Robins Pharmaceuticals, in which I helped develop an infant version of Dristan nasal spray. Then I changed to the polyurethane industry and became a research chemist for Carpenter Company. While there, I worked in both the molded and flexible foam labs. I had the opportunity to develop molded foam for Toyota Solara car seats and flexible foam for the furniture and bedding industry.

In 2001, I decided to be a stay-at-home mom, but it was too difficult to give up my love of science. Consequently, I decided to offer myself as a tutor to the local high schools. In fact, I have tutored several Deep Run students in the past. Over the years, my tutoring students kept encouraging me to become a teacher, but I did not have a certificate. In 2009, the Southside Homeschool Academy asked me to teach science and math. This was the perfect way to get my feet wet, and I loved every minute of it. I taught Chemistry, Physical Science, and Algebra 2 until 2014, when my neighbor finally talked me into becoming a Career Switcher with her. I graduated from Regent University Career Switcher program in 2015 and was hired to teach chemistry at Henrico High School – *Behold the Green and Gold!* In spring of 2016, I found out that Henrico High School no longer needed a fourth chemistry teacher, so I went from being a *Warrior* to a *Wildcat!*

Chemistry is the study of matter and energy. It is everywhere around you – cleaning products, plastics, paints, glass, ceramics, metals, and every other material both natural and man-made are all the examples of Chemistry. This class may be intensive and challenging, but I hope to make it a friendly learning environment. Students will perform several inquiry-based laboratory activities and collaborate with peers to determine the scientific principles involved. Discussion of contemporary scientific issues will also be part of our curriculum in order to engage students in real world problems and improve their critical thinking skills.

In order for students succeed, I am asking them to do their best to finish assignments on time, and I encourage them to ask questions in and outside of class. I am often available before school, during lunch and after school. I also encourage students to read the upcoming material before coming to class so that they can access prior knowledge and prepare questions for class discussion.

Students are most academically successful when parents and guardians are involved in their education. I appreciate your support in encouraging students to be active and responsible in keeping up with their work. In the event of absence, students are responsible for making up missed assignments. I will be communicating with parents and students frequently through email. If your email address changes at any time, please let me know as soon as possible. Feel free to contact me at any time with questions or concerns.

Sincerely,

