Geoscience related disciplines serve interests in various applied fields and provide unique opportunities for learning in a variety of settings including: classroom, laboratory, outdoors, and internships. However, challenges persist in our ability to engage incoming students whose first encounter with geosciences and related fields often occur in college. Few students have experience with, or the opportunity to engage with apprenticeships. Unlike other learning opportunities, apprenticeships, take students out of the classroom into a professional environment early in a student’s tenure. Industry supported geosciences apprenticeship programs (GAP) offer the possibility to inspire and foster development early in students.

GAP is highly successful for students, companies/organizations (supervisor/mentor), and academic departments/programs. For a student, GAP enhances the academic experience, promotes retention, and increases degree attainment. Sponsors grow a larger pool of qualified applicants who are ready to fill high-skilled positons. GAP benefits academic departments with information related to local and general industry trends, the needs and expectations of potential employers. GAP aids in curriculum development/enhancement, as students and mentor surveys provide valuable information that can be leveraged to improve curricula and help departments address critical skills needed in the work place. Ultimately, with GAP graduates at all levels are better prepared to meet the demands of industry or further education.

This presentation will describe best practices, stakeholder (faculty, student, professional supervisor/mentor) roles and summarize our experience implementing the apprenticeship program at FHSU. It will end with examples of the benefits of apprenticeships in learning, research and professional development.

Dr. Hendratta Ali joined Fort Hays State University in 2010, to develop a new petroleum geology program. In addition to teaching, she also supervises the geology apprenticeship program, mentors several undergraduates and graduate students and advises the AAPG/SEG student chapters. She serves in several leadership roles in professional societies and also offers petroleum geology short courses and workshops to working professionals.

She is a recipient of many awards including: AAPG 2017 Inspirational Geoscience Educator, OSU College of Arts and Sciences Rising Star, FHSU Outstanding Graduate Advisor, John Heinrich’s Outstanding Undergraduate Research Mentor among others. In her spare time she is a recreational soccer coach, enjoys hiking, dancing and reading mysteries.