

20 – STEM Curriculum

Tri-River Extension and Western Colorado Research Center

Application for CSU Extension Intern 2019

1. Mentors: Nicole Goza, Tri River Extension STEM/K-12 Enrichment Program <http://tra.extension.colostate.edu/stem-k12/about-stem-k12/> and Amanda McQuade, Community Alliance for Education and Hunger Relief at Western Colorado Research Center www.communityalliance.extension.colostate.edu.

Dr. Mike Martin, Assistant Professor, Agricultural Education, Department of Agricultural and Resource Economics, (970) 491-6949, michael.j.martin@colostate.edu

2. Western Colorado - Montrose and Grand Junction. Intern will split time between the Montrose office of Tri-River Extension and Grand Junction office at Western Colorado Research Center.
3. The objectives of this internship are to develop a customized STEM curriculum for use with the K-12 Community Alliance Farm to School Education program. Interns will work with STEM/K-12 specialist to identify and develop STEM lesson plans and work with the Community Alliance program coordinator to customize the lessons to fit programmatic needs. The intern will also work with Extension Agent, Nicole Goza, in her duties as a 4-H Program Associate, STEM and K-12 programming and outreach.
4. This internship mainly lies in the STEM/K-12 area but also has applicability to Family and Consumer Science (nutrition education) and 4-H.
5. The intern will gain skills applicable to careers involving youth STEM Education, such as a school STEM teacher or coordinator or an Extension STEM/4-H agent. Our ideal candidate is interested in youth education and has a background in any field of education, science, technology, engineering, or math.
 - identify reliable sources of STEM lessons;
 - customize the lessons to the needs, assets, and limitations of the Community Alliance program;
 - connect the learning objectives of the lessons to Colorado Education standards;
 - assemble learning kits;
 - compile the information in a tool useful for local implementation and possible state-wide dissemination;
 - lead a STEM lesson with students whenever possible; and
 - serve the community with the STEM/K-12 Extension Agent.

Opportunities for professional development: Maker Faire, E-Extension Learning, National Afterschool Association, and shadowing Dr. Barbara Shaw (Regional STEM Specialist).

6. Community Alliance for Education and Hunger Relief is a farm-to-school and farm-to-school program based at the Western Colorado Research Center that provides hands-on educational opportunities for students in food production, life sciences, food insecurity, and nutrition. The lessons will support service learning in the Western Colorado Research Center's orchards, vegetable production fields, classroom, and teaching kitchen. The lessons may also be used in School District 51 classrooms lead by either district teachers or CSU Extension agents. In 2018, the Community Alliance provided 3982 hands-on learning hours at the Research Center to students from area schools and youth organizations. We also engaged 732 students in their classrooms as guest educators. The development of the STEM curriculum will benefit Western Slope students as a part of the Community Alliance program, but it may also be included in a toolkit that will support implementation of a Community Alliance-type program at the other CSU Research Centers across the state.
7. Currently there are no CSU faculty associated with this project.
8. There is free student housing available at either the Western Colorado Research Center Orchard Mesa Station or Rogers Mesa Station, depending on the intern's preference. The student will have periodic access to a CSU vehicle if they reside at the Orchard Mesa Station or there will be a \$500 gas allowance to reimburse for travel in a personal vehicle between the residence and Montrose.